



## Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Client: LEE TECHNICAL SERVICES

Client ID: C5 Site: None  
Project: UPRR Project No.: 2063683 Sample Qu:  
Lab ID: 20479413 Matrix: Soil % Moisture: Not Corrected  
Description: None Prep Level: Soil Batch: 77953  
Method: 8015 TPH Extractables Soil Units: mg/kg Target List: TPH SL20  
Prep Factor: 1 Collected: 10/18/06 Received: 10/20/06  
Prepared: 10/23/06 Analyzed: 10/27/06 20:41 SEP11/11

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
	Diesel Range Organics (C10-28)	10	10200	D1	22.1	100.	65.0
	Oil Range Organics (>C28-40)	10	4440	D1	79.3	500.	180.

2 compounds/0 reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-extract sample size.  
Reporting limits is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, the moisture result is not corrected for moisture and also denotes not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) subextract or field.

11/7/2006 15:03:32  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 28-0581  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA000023  
Florida Dept. of Health (FELAC) - E87305  
Kansas Dept. of Health Environment - E-10206  
U.S. Dept. of Agriculture Foreign Soil Permit - 2-47278



## Report of Laboratory Analysis

Pace Analytical Services, Inc.  
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St. Rose, LA 70087  
Phone: 504.459.0333  
Fax: 504.489.0555  
LELAP N 02008

Client: LEE TECHNICAL SERVICES

Client ID: C5 Site: None  
Project: UPRR Project No.: 2061683 Sample Qu:  
Lab ID: 20479413 Matrix: Soil % Moisture: Not Corrected  
Description: None Prep Level: Soil Batch: 78052  
Method: 8015 TPH Gasoline Med Soil Units: mg/kg Target List: TPHGM SL20  
Collected: 10/18/06 Received: 10/20/06  
Prepared: 10/23/06 Analyzed: 10/25/06 00:03 BYT(1)  
Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
	Gasoline Range Organics(C6-10)	1	137.		1.62	11.7	65.0

1 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-weighed sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, not detected results are not corrected for moisture and a's denote not applicable.  
Regulatory limit denotes an actual regulatory limit or a client-requested notification limit.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) out-of-state or field.

11/7/2006 16:02:12  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 6200R  
Arkansas Dept. of Environmental Quality - 58-0461  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (FDEALC) - 88708  
Kansas Dept. of Health Environment - 6-10368  
U.S. Dept. of Agriculture Foreign Soil Permit - 6-47370



## Report of Laboratory Analysis

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1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Client: LEE TECHNICAL SERVICESClient ID: C5Site: NoneProject: UPRRProject No.: 2063683

Sample Qu:

Lab ID: 20479413Matrix: Soil% Moisture: Not CorrectedDescription: NonePrep Level: SoilBatch: 77402Method: 8082 PCBs Low SoilUnits: mg/kgTarget List: 8082 SL20Prep Factor: 1Collected: 10/18/06Received: 10/20/06Prepared: 10/24/06Analyzed: 10/26/06 17:22 SLE111

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
12674-11-2	PCB-1016 (Aroclor 1016)	20	ND	D2	0.178	0.666	0.110
11104-28-2	PCB-1221 (Aroclor 1221)	20	ND	D2	0.246	0.666	0.110
11141-16-5	PCB-1232 (Aroclor 1232)	20	ND	D2	0.200	0.666	0.110
53469-21-9	PCB-1242 (Aroclor 1242)	20	ND	D2	0.208	0.666	0.110
12672-29-6	PCB-1248 (Aroclor 1248)	20	ND	D2	0.161	0.666	0.110
11097-69-1	PCB-1254 (Aroclor 1254)	20	ND	D2	0.191	0.666	0.110
11096-82-5	PCB-1260 (Aroclor 1260)	20	ND	D2	0.154	0.666	0.110

? recomputed if reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-quantar sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For confidence you see, wet down result is not corrected for moisture and is therefore not applicable.  
Regulatory Limit denotes an actual regulatory limit or a client-requested notification limit.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) in house test or field.

10/26/06 16:02:11  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 28-0581  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060022  
Florida Dept. of Health (FELAC) - E87565  
Kansas Dept. of Health Environment - E-10386  
U.S. Dept. of Agriculture Foreign Soil Permit - 8-47270



## Report of Laboratory Analysis

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Phone: 504.469.0333  
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LELAP # 02006

Client: LEE TECHNICAL SERVICESClient ID: C6Site: NoneProject: UPRKProject No.: 2063683

Sample Qu:

Lab ID: 20479414Matrix: Soil% Moisture: Not CorrectedDescription: NonePrep Level: SoilBatch: 77953Method: 8015 TPH Extractables SoilUnits: mg/kgTarget List: TPH SL20Collected: 10/18/06Received: 10/20/06Prep Factor: 1Prepared: 10/23/06Analyzed: 10/27/06 19:50 SPPLM

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
	Diesel Range Organics (C10-28)	10	3070	D1	22.1	100.	65.0
	Oil Range Organics (>C28-40)	10	2060	D1	79.3	500.	180.

2 compounds(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a wet-weight sample dry.  
Reporting Limit is corrected for sample dil., dilution and moisture content if applicable.  
Qu denotes quality. Specific quality is defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and a/s denotes not applicable.  
Regulatory Limit denotes an actual regulatory limit or a client-requested notification limit.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) subcontract or field.

New Orleans Laboratory Certification  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 03-068  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060022  
Florida Dept. of Health (FELAC) - E-17305  
Kansas Dept. of Health Environment - E-02288  
U.S. Dept. of Agriculture Foreign Soil Permit - 0-07270

5/17/2004 10:02:12



# Report of Laboratory Analysis

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 LELAP # 02006

Client: LEE TECHNICAL SERVICES

Client ID: <u>C6</u>	Site: <u>None</u>	
Project: <u>UPRR</u>	Project No.: <u>2063683</u>	Sample Qu:
Lab ID: <u>20479414</u>	Matrix: <u>Soil</u>	% Moisture: <u>Not Corrected</u>
Description: <u>None</u>	Prep Level: <u>Soil</u>	Batch: <u>78052</u>
Method: <u>8015 TPH Gasoline Mod Soil</u>	Units: <u>mg/kg</u>	Target List: <u>TPHGM SL20</u>
	Collected: <u>10/18/06</u>	Received: <u>10/20/06</u>
Prep Factor: <u>1</u>	Prepared: <u>10/23/06</u>	Analyzed: <u>10/23/06 00:59 EDT (1)</u>

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
	Gasoline Range Organics(C6-10)	1	104.		1.74	12.5	65.0

1 compared to reported

ND denotes Not Detected at or above the adjusted reporting limit.  
 If denotes Dilution Factor of solvent. The Prep Factor accounts for a non-constant sample size.  
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
 Regulatory Limit denotes an actual regulatory limit or a client-requested notification limit.  
 Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Breaux Clif, (4) Houston, or (5) subcontract or field.

11/7/2004 15:02:12  
 New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 02006  
 Arkansas Dept. of Environmental Quality - 08-0481  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA000023  
 Florida Dept. of Health (FELAC) - E87993  
 Kansas Dept. of Health Environment - E-10266  
 U.S. Dept. of Agriculture Foreign Soil Permit - 3-47270



# Report of Laboratory Analysis

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 Fax: 504.489.0335  
 LELAP # 02006

Client: LEE TECHNICAL SERVICES

Client ID: C6 Site: None  
 Project: UPRR Project No.: 2063683 Sample Qu:  
 Lab ID: 20479414 Matrix: Soil % Moisture: Not Corrected  
 Description: None Prep Level: Soil Batch: 77402  
 Method: 8082 PCBs Low Soil Units: mg/kg Target List: 8082 SL20  
 Collected: 10/18/06 Received: 10/20/06  
 Prep Factor: 1 Prepared: 10/24/06 Analyzed: 10/26/06 17:37 SLE:m

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
12674-11-2	PCB-1016 (Aroclor 1016)	20	ND	D2	0.178	0.666	0.110
11104-28-2	PCB-1221 (Aroclor 1221)	20	ND	D2	0.246	0.666	0.110
11141-16-5	PCB-1232 (Aroclor 1232)	20	ND	D2	0.200	0.666	0.110
53469-21-9	PCB-1242 (Aroclor 1242)	20	ND	D2	0.208	0.666	0.110
12672-29-6	PCB-1248 (Aroclor 1248)	20	ND	D2	0.101	0.666	0.110
11097-69-1	PCB-1254 (Aroclor 1254)	20	ND	D2	0.191	0.666	0.110
11096-82-5	PCB-1260 (Aroclor 1260)	20	ND	D2	0.154	0.666	0.110

7 compounds reported

ND denotes Not Detected at or above the adjusted reporting limit.  
 If Assay Dilution Factor of extract. The Prep Factor accounts for a one-portion sample dil.  
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
 Qu data quality. Specific quality are defined at the end of the report.  
 For moisture results, wet weights basis is not corrected for moisture and no limit is not applicable.  
 Regulatory Limit denotes a federal regulatory limit or a client-requested notification limit.  
 Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) subcontract or field.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 02006  
 Arkansas Dept. of Environmental Quality - 88-0887  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA040029  
 Florida Dept. of Health (HEALAC) - E87385  
 Kansas Dept. of Health Environment - 6-10288  
 U.S. Dept. of Agriculture Foreign Soil Permit - 6-47370

10/26/06 16:01:12



# Report of Laboratory Analysis

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LELAP # 02006

Client: LEE TECHNICAL SERVICES

Client ID: <u>W1</u>	Site: <u>None</u>	
Project: <u>UPRR</u>	Project No.: <u>2063683</u>	Sample Qu:
Lab ID: <u>20479415</u>	Matrix: <u>Water</u>	% Moisture: <u>n/a</u>
Description: <u>None</u>	Prep Level: <u>Water</u>	Batch: <u>77855</u>
Method: <u>8015 TPH Extractables Water</u>	Units: <u>mg/L</u>	Target List: <u>TPH WL20</u>
	Collected: <u>10/18/06</u>	Received: <u>10/20/06</u>
Prep Factor: <u>1</u>	Prepared: <u>10/24/06</u>	Analyzed: <u>10/27/06 19:50 SPELLO</u>

CAS Number	Parameter	Dilution	Result	Qc	Adjusted MDL	Reporting Limit	Reg. Limit
	Diesel Range Organics (C10-28)	1	13.5		0.0383	0.150	0.150
	Oil Range Organics (>C28-40)	1	5.13		0.0315	0.150	0.150

2 components reported

ND denotes Not Detected or so above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qc Rate qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet diesel result is not corrected for moisture and n/a denotes not applicable.  
Regulatory Limit denotes an actual regulatory limit or a client-requested notification limit.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bogalusa City, (4) Houston, or (5) sub-contract or field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 03804  
Arkansas Dept. of Environmental Quality - 05-0881  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA000027  
Florida Dept. of Health (FDEH) - E07863  
Kansas Dept. of Health - Environment - 0-10266  
U.S. Dept. of Agriculture Foreign Soil Panel - 0-47270

11/7/2006 14:02:12



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.489.0333  
 Fax: 504.469.0555  
 LELAP # 02006

Client: LEE TECHNICAL SERVICES

Client ID: W1 Site: None  
 Project: UPRR Project No.: 2063683 Sample Qu:  
 Lab ID: 20479415 Matrix: Water % Moisture: n/a  
 Description: None Prep Level: Water Batch: 78193  
 Method: 8015 TPH Gasoline Water Units: mg/L Target List: TPHG WL20  
 Collected: 10/18/06 Received: 10/20/06  
 Prepared: 10/28/06 Analyzed: 10/28/06 00:00 DET (1)  
 Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qu	Adjusted MDL	Reporting Limit	Reg. Limit
	Gasoline Range Organics(C6-10)	1	ND		0.0156	0.0500	0.150

1 response(s) reported

ND denotes Not Detected at or above the adjusted reporting level.  
 DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-liquid sample size.  
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 For spot-check results, wet density result is not corrected for moisture and no density not applicable.  
 Regulatory Limit denotes an actual regulatory limit or a client-requested notification limit.  
 Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder CO, (4) Houston, or (5) subcontract or field.

11/7/2006 14:02:12  
 New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 01008  
 Arkansas Dept. of Environmental Quality - 88-0861  
 Louisiana Dept. of Health and Hospital / Drinking Water - LA000023  
 Florida Dept. of Health (FELAC) - 287065  
 Kansas Dept. of Health - Environment - 6-10284  
 U.S. Dept. of Agriculture Foreign Soil Permit - 5-47370





# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
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Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Client: LEE TECHNICAL SERVICES

Client ID: W1 Site: None  
Project: UPRR Project No.: 2063683 Sample Qu:  
Lab ID: 20479415 Matrix: Water % Moisture: n/a  
Description: None Prep Level: Water Batch: 78037  
Method: 8082 PCBs Water Units: mg/L Target List: 8082 W1.20  
Collected: 10/18/06 Received: 10/20/06  
Prepared: 10/23/06 Analyzed: 10/26/06 18:22 SLE(1)  
Prep Factor: 1

CAS Number	Parameter	Dilution	Result	Qc	Adjusted MDL	Reporting Limit	Reg. Limit
12674-11-2	PCB-1016 (Aroclor 1016)	1	ND		0.000169	0.00100	0.00050
11104-28-2	PCB-1221 (Aroclor 1221)	1	ND		0.000200	0.00100	0.00050
11141-16-5	PCB-1232 (Aroclor 1232)	1	ND		0.000200	0.00100	0.00050
53469-21-9	PCB-1242 (Aroclor 1242)	1	ND		0.000200	0.00100	0.00050
12672-29-6	PCB-1248 (Aroclor 1248)	1	ND		0.000200	0.00100	0.00050
11097-69-1	PCB-1254 (Aroclor 1254)	1	ND		0.000200	0.00100	0.00050
11096-82-5	PCB-1260 (Aroclor 1260)	1	ND		0.000112	0.00100	0.00050

7 compounds reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-venter sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qc (aka quality). Specific quality results are listed at the end of the report.  
For moisture results, wet density result is not corrected for moisture and no density not applicable.  
Regulatory Limit denotes an actual regulatory limit or a client-requested notification limit.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder CO, (4) Houston, or (5) subcontract or other.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 19-0021  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (FHEAC) - EST005  
Kansas Dept. of Health, Environment - E-10266  
U.S. Dept. of Agriculture Foreign Soil Permit - 14-47279

11/7/2006 14:02:12



## Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
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Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Client ID: BM-1Client: LEE TECHNICAL SERVICESProject: UPRRSite: NoneLab ID: 20479408Project No.: 2063683Description: NoneMatrix: Soil%Moisture: Not CorrectedCollected: 10/18/06Received: 10/20/06

ParameterName	Method	Batch	DF	Result	Qo	Units	Adjusted MDL	Reporting Limit	Prep.	Analysis	Reg. Limit
Antimony	EPA 6010	78012	1	16.3		mg/kg	0.674	2.78	10/20	11/03 16:29 KJR (1)	3.10
Arsenic	EPA 6010	78012	1	6.51		mg/kg	0.330	0.926	10/20	11/03 16:29 KJR (1)	12.0
Beryllium	EPA 6010	78012	1	0.209 J		mg/kg	0.0413	0.463	10/20	11/03 16:29 KJR (1)	8.00
Cadmium	EPA 6010	78012	1	0.288 J		mg/kg	0.0408	0.463	10/20	11/03 16:29 KJR (1)	3.90
Chromium	EPA 6010	78012	1	4.10		mg/kg	0.140	0.926	10/20	11/03 16:29 KJR (1)	100.
Copper	EPA 6010	78012	1	176.		mg/kg	0.535	0.926	10/20	11/03 16:29 KJR (1)	310.
Lead	EPA 6010	78012	1	444.		mg/kg	0.238	0.463	10/20	11/03 16:29 KJR (1)	100.
Mercury	EPA 7471	78010	1	0.0130J		mg/kg	0.00165	0.0194	10/20	10/20 16:20 KDG (1)	
Nickel	EPA 6010	78012	1	224.		mg/kg	0.564	3.70	10/20	11/03 16:29 KJR (1)	160.
Selenium	EPA 6010	78012	1	2.25 J		mg/kg	0.956	3.24	10/20	11/03 16:29 KJR (1)	20.0
Silver	EPA 6010	78012	1	ND		mg/kg	0.168	0.926	10/20	11/03 16:29 KJR (1)	39.0
Thallium	EPA 6010	78012	1	1.44		mg/kg	0.422	0.926	10/20	11/03 16:29 KJR (1)	0.550
Zinc	EPA 6010	78012	1	133.		mg/kg	0.443	1.85	10/20	11/03 16:29 KJR (1)	2300

13 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. FF denotes sample Prep Factor which accounts for a non-numeric sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qo lists qualitative. Specific qualitative are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and is a denotes not applicable.  
(1a) pH less than 7.0 or greater than 12.5 is hazardous for toxicity.  
(1b) Flash point less than 140 degrees F is hazardous for ignitability.  
Analysis performed in (1) New Orleans, (2) Texas Range, (3) Boulder City, (4) Houston, or (5) subcontracted or field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 88-0887  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (HELAC) - 287963  
Kansas Dept. of Health Environment - E-03266  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

11/7/2008 10:02:14



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70067  
 Phone: 504.489.0333  
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 LELAP # 02006

Client ID: CL  
 Project: UPRR  
 Lab ID: 20479409  
 Description: None

Client: LEE TECHNICAL SERVICES  
 Site: None  
 Project No.: 2063683  
 Matrix: Soil %Moisture: Not Corrected  
 Collected: 10/18/06 Received: 10/20/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Adjusted MDL	Reporting Limit	Prep.	Analysis	Reg. Limit
Antimony	EPA 6010	78012	1	1.08 J		mg/kg	0.569	2.34	10/20	11/03 16:58 KJR (1)	3.10
Arsenic	EPA 6010	78012	1	4.94		mg/kg	0.279	0.781	10/20	11/03 16:58 KJR (1)	12.0
Beryllium	EPA 6010	78012	1	0.570		mg/kg	0.0348	0.391	10/20	11/03 16:58 KJR (1)	8.00
Cadmium	EPA 6010	78012	1	0.157 J		mg/kg	0.0345	0.391	10/20	11/03 16:58 KJR (1)	3.90
Chromium	EPA 6010	78012	1	9.67		mg/kg	0.118	0.781	10/20	11/03 16:58 KJR (1)	100.
Copper	EPA 6010	78012	1	17.7		mg/kg	0.451	0.781	10/20	11/03 16:58 KJR (1)	310.
Lead	EPA 6010	78012	1	15.8		mg/kg	0.200	0.391	10/20	11/03 16:58 KJR (1)	100.
Mercury	EPA 7471	78010	1	0.0278		mg/kg	0.00159	0.0188	10/20	10/20 16:25 KDG (1)	
Nickel	EPA 6010	78012	1	18.4		mg/kg	0.476	3.12	10/20	11/03 16:58 KJR (1)	160.
Selenium	EPA 6010	78012	1	1.18 J		mg/kg	0.807	2.73	10/20	11/03 16:58 KJR (1)	20.0
Silver	EPA 6010	78012	1	ND		mg/kg	0.142	0.781	10/20	11/03 16:58 KJR (1)	39.0
Thallium	EPA 6010	78012	1	ND		mg/kg	0.356	0.781	10/20	11/03 16:58 KJR (1)	0.550
Zinc	EPA 6010	78012	1	44.2		mg/kg	0.274	1.56	10/20	11/03 16:58 KJR (1)	2300

13 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
 DF denotes Degrees of Freedom. PF denotes sample Prep Factor which accounts for a non-unity sample size.  
 Reporting Limit is corrected for sample size, dilution and unitary system if applicable.  
 Qu (1) qualifier. Specific qualifiers are defined at the end of the report.  
 For moisture results, wet weights result is not corrected for moisture and its density not applicable.  
 (1) pH less than 3.0 or greater than 12.5 is hazardous for reactivity.  
 (1b) Flash point less than 140 degrees F is hazardous for ignitability.  
 Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) subcontract or field.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 02006  
 Arkansas Dept. of Environmental Quality - 88-0881  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA06023  
 Florida Dept. of Health (FELAC) - E-27305  
 Kansas Dept. of Health - Environmental - E-10286  
 U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

11/7/2006 16:52:14



## Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Client ID: G2Client: LEE TECHNICAL SERVICESProject: UPRRSite: NoneLab ID: 20479410Project No.: 2063683Description: NoneMatrix: Soil%Moisture: Not CorrectedCollected: 10/18/06Received: 10/20/06

Parameter Name	Method	Batch	DF	Result	Qu	Units	Adjusted MDL	Reporting Limit	Prep.	Analysis	Rep. Limit
Antimony	EPA 6010	78012	1	0.685 J		mg/kg	0.662	2.73	10/20	11/03 17:02 KJR (1)	3.10
Arsenic	EPA 6010	78012	1	ND		mg/kg	0.324	0.909	10/20	11/03 17:02 KJR (1)	12.0
Beryllium	EPA 6010	78012	1	0.599		mg/kg	0.0403	0.455	10/20	11/03 17:02 KJR (1)	8.00
Cadmium	EPA 6010	78012	1	0.0943 J		mg/kg	0.0401	0.455	10/20	11/03 17:02 KJR (1)	3.90
Chromium	EPA 6010	78012	1	11.0		mg/kg	0.137	0.909	10/20	11/03 17:02 KJR (1)	100.
Copper	EPA 6010	78012	1	17.9		mg/kg	0.523	0.909	10/20	11/03 17:02 KJR (1)	310.
Lead	EPA 6010	78012	1	13.4		mg/kg	0.233	0.455	10/20	11/03 17:02 KJR (1)	100.
Mercury	EPA 7471	78010	1	0.0305		mg/kg	0.00146	0.0171	10/20	10/20 16:22 KDG (1)	
Nickel	EPA 6010	78012	1	17.2		mg/kg	0.554	3.64	10/20	11/03 17:02 KJR (1)	160.
Selenium	EPA 6010	78012	1	ND		mg/kg	0.939	3.18	10/20	11/03 17:02 KJR (1)	20.0
Silver	EPA 6010	78012	1	ND		mg/kg	0.165	0.909	10/20	11/03 17:02 KJR (1)	39.0
Thallium	EPA 6010	78012	1	ND		mg/kg	0.414	0.909	10/20	11/03 17:02 KJR (1)	0.550
Zinc	EPA 6010	78012	1	46.9		mg/kg	0.435	1.82	10/20	11/03 17:02 KJR (1)	2300

13 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Degrees of Freedom of final sample. DF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu indicates quality. Specific quality are defined at the end of the report.  
For moisture results, wet density result is not corrected for moisture and a/s denotes not applicable.  
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.  
(1b) Flash point less than 140 degrees F is hazardous for ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Shreveport, (4) Houston, or (5) subcontract or field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02008  
Arkansas Dept. of Environmental Quality - 88-0381  
Louisiana Dept. of Health and Hospitals (Drinking Water) - LA000073  
Florida Dept. of Health (ARLAC) - E37389  
Kansas Dept. of Health Environment - 6-10286  
U.S. Dept. of Agriculture Foreign Soil Permit - 3-47275

10/20/06 16:07:14



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.489.0333  
 Fax: 504.489.0555  
 LELAP # 02006

Client ID: C3

Client: LEE TECHNICAL SERVICES

Project: UPRR

Site: None

Lab ID: 20479411

Project No.: 2063683

Description: None

Matrix: Soil

%Moisture: Not Corrected

Collected: 10/18/06

Received: 10/20/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Adjusted MDL	Reporting Limit	Prep.	Analysis	Reg. Limit
Antimony	EPA 6010	78012	1	9.30		mg/kg	0.607	2.50	10/20	11/03 17:06 KJR (1)	3.10
Arsenic	EPA 6010	78012	1	7.07		mg/kg	0.297	0.833	10/20	11/03 17:06 KJR (1)	12.0
Beryllium	EPA 6010	78012	1	0.335 J		mg/kg	0.0372	0.417	10/20	11/03 17:06 KJR (1)	8.00
Cadmium	EPA 6010	78012	1	0.329 J		mg/kg	0.0368	0.417	10/20	11/03 17:06 KJR (1)	3.90
Chromium	EPA 6010	78012	1	4.50		mg/kg	0.126	0.833	10/20	11/03 17:06 KJR (1)	100.
Copper	EPA 6010	78012	1	109.		mg/kg	0.481	0.833	10/20	11/03 17:06 KJR (1)	310.
Lead	EPA 6010	78012	1	157.		mg/kg	0.214	0.417	10/20	11/03 17:06 KJR (1)	100.
Mercury	EPA 7471	78010	1	0.0429		mg/kg	0.00159	0.0188	10/20	10/20 16:29 KDG (1)	
Nickel	EPA 6010	78012	1	39.8		mg/kg	0.508	3.33	10/20	11/03 17:06 KJR (1)	160.
Selenium	EPA 6010	78012	1	0.963 J		mg/kg	0.861	2.92	10/20	11/03 17:06 KJR (1)	20.0
Silver	EPA 6010	78012	1	ND		mg/kg	0.151	0.833	10/20	11/03 17:06 KJR (1)	39.0
Thallium	EPA 6010	78012	1	0.662 J		mg/kg	0.380	0.833	10/20	11/03 17:06 KJR (1)	0.550
Zinc	EPA 6010	78012	1	74.2		mg/kg	0.399	1.67	10/20	11/03 17:06 KJR (1)	2300

15 parameters reported

MDL denotes Not Detected or is above the adjusted reporting limit.  
 DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
 For moisture results, wet denotes result is not corrected for moisture and air density not applicable.  
 (1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.  
 (1b) Flash point less than 140 degrees F is hazardous for ignitability.  
 Analytic performed by (1) New Orleans, (2) Baton Rouge, (3) Breaux City, (4) Houston, or (5) not reported as field.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 02006  
 Arkansas Dept. of Environmental Quality - 88-0181  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA-060023  
 Florida Dept. of Health (FDEAC) - E-07585  
 Kansas Dept. of Health Environment - E-10286  
 U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

11/17/2006 15:02:33



## Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Client ID: C4Client: LEE TECHNICAL SERVICESProject: UPRRSite: NoneLab ID: 20479412Project No.: 2063683Description: NoneMatrix: Soil%Moisture: Not CorrectedCollected: 10/18/06Received: 10/20/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Adjusted MDL	Reporting Limit	Prep.	Analysis	Reg. Limit
Antimony	EPA 6010	78012	1	2.54	J	mg/kg	0.674	2.78	10/20	11/03 17:13 KJR (1)	3.10
Arsenic	EPA 6010	78012	1	3.13		mg/kg	0.330	0.926	10/20	11/03 17:13 KJR (1)	12.0
Beryllium	EPA 6010	78012	1	0.429	J	mg/kg	0.0413	0.463	10/20	11/03 17:13 KJR (1)	8.00
Cadmium	EPA 6010	78012	1	0.419	J	mg/kg	0.0408	0.463	10/20	11/03 17:13 KJR (1)	3.90
Chromium	EPA 6010	78012	1	8.49		mg/kg	0.140	0.926	10/20	11/03 17:13 KJR (1)	100.
Copper	EPA 6010	78012	1	144.		mg/kg	0.535	0.926	10/20	11/03 17:13 KJR (1)	310.
Lead	EPA 6010	78012	1	265.		mg/kg	0.238	0.463	10/20	11/03 17:13 KJR (1)	100.
Mercury	EPA 7471	78010	1	0.0829	J	mg/kg	0.00165	0.0194	10/20	10/20 16:31 KDG (1)	
Nickel	EPA 6010	78012	1	13.5		mg/kg	0.564	3.70	10/20	11/03 17:13 KJR (1)	160.
Selenium	EPA 6010	78012	1	0.993	J	mg/kg	0.956	3.24	10/20	11/03 17:13 KJR (1)	20.0
Silver	EPA 6010	78012	1	ND		mg/kg	0.168	0.926	10/20	11/03 17:13 KJR (1)	39.0
Thallium	EPA 6010	78012	1	ND		mg/kg	0.422	0.926	10/20	11/03 17:13 KJR (1)	0.550
Zinc	EPA 6010	78012	1	123.		mg/kg	0.443	1.85	10/20	11/03 17:13 KJR (1)	2300

(3 parameters reported)

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. FY denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and air denotes not applicable.  
(1) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.  
(1b) Flash point less than 100 degrees F is hazardous for ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) subcontract or field.

New Orleans Laboratory Certification  
11/27/2004 14-0215  
Louisiana Dept. of Environmental Quality (LELAP) - 03208  
Arkansas Dept. of Environmental Quality - 88-0481  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (FELAC) - E-0200  
Kansas Dept. of Health Environment - E-0206  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47379



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0335  
 LELAP # 02006

Client ID: C5

Client: LEE TECHNICAL SERVICES

Project: UPRR

Site: None

Lab ID: 20479413

Project No.: 2063683

Description: None

Matrix: Soil

%Moisture: Not Corrected

Collected: 10/18/06

Received: 10/20/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Adjusted MDL	Reporting Limit	Prep.	Analysis	Reg. Limit
Antimony	EPA 6010	78012	1	12.5		mg/kg	0.506	2.08	10/20	11/03 17:17 KJR (1)	3.10
Arsenic	EPA 6010	78012	1	12.1		mg/kg	0.248	0.694	10/20	11/03 17:17 KJR (1)	12.0
Beryllium	EPA 6010	78012	1	0.273 J		mg/kg	0.0310	0.347	10/20	11/03 17:17 KJR (1)	8.00
Cadmium	EPA 6010	78012	1	0.380		mg/kg	0.0306	0.347	10/20	11/03 17:17 KJR (1)	3.90
Chromium	EPA 6010	78012	1	4.45		mg/kg	0.105	0.694	10/20	11/03 17:17 KJR (1)	100.
Copper	EPA 6010	78012	1	365.		mg/kg	0.401	0.694	10/20	11/03 17:17 KJR (1)	310.
Lead	EPA 6010	78012	1	320.		mg/kg	0.178	0.347	10/20	11/03 17:17 KJR (1)	100.
Mercury	EPA 7471	78010	1	0.0350		mg/kg	0.00150	0.0176	10/20	10/20 16:33 KDG (1)	
Nickel	EPA 6010	78012	1	44.4		mg/kg	0.423	2.78	10/20	11/03 17:17 KJR (1)	160.
Selenium	EPA 6010	78012	1	ND		mg/kg	0.717	2.43	10/20	11/03 17:17 KJR (1)	20.0
Silver	EPA 6010	78012	1	ND		mg/kg	0.126	0.694	10/20	11/03 17:17 KJR (1)	39.0
Thallium	EPA 6010	78012	1	ND		mg/kg	0.317	0.694	10/20	11/03 17:17 KJR (1)	0.550
Zinc	EPA 6010	78012	1	113.		mg/kg	0.332	1.39	10/20	11/03 17:17 KJR (1)	2300

13 Parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
 DF denotes Dilution Factor of final sample; FF denotes sample Prep Factor which accounts for a non-routine sample size.  
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
 Qu this qualifier. Specific qualifiers are defined at the end of the report.  
 For moisture results, not detected result is not corrected for moisture and its diameter not applicable.  
 (1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.  
 (1b) Flash point less than 140 degrees F is hazardous for ignitability.  
 Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Metairie City, (4) Houston, or (5) subcontracted or field.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 82008  
 Arkansas Dept. of Environmental Quality - 88-080  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA060073  
 Florida Dept. of Health (FHEAC) - EST185  
 Kansas Dept. of Health Environment - E-10286  
 U.S. Dept. of Agriculture Foreign Soil Permit - S-47379

11/7/2006 16:02:13



## Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70067  
Phone: 504.469.0333  
Fax: 504.469.0553  
LELAP # 02006

Client ID: C6Client: LEE TECHNICAL SERVICESProject: UPRRSite: NoneLab ID: 20479414Project No.: 2063683Description: NoneMatrix: Soil%Moisture: Not CorrectedCollected: 10/18/06Received: 10/20/06

Parameter/Name	Method	Batch	DF	Result	Q#	Units	Adjusted MDL	Reporting Limit	Prep.	Analysis	Reg. Limit
Antimony	EPA 6010	78012	1	18.8		mg/kg	0.617	2.54	10/20	11/03 17:22 KJR (1)	3.10
Arsenic	EPA 6010	78012	1	12.0		mg/kg	0.302	0.847	10/20	11/03 17:22 KJR (1)	12.0
Beryllium	EPA 6010	78012	1	0.337 J		mg/kg	0.0378	0.424	10/20	11/03 17:22 KJR (1)	8.00
Cadmium	EPA 6010	78012	1	0.625		mg/kg	0.0374	0.424	10/20	11/03 17:22 KJR (1)	3.90
Chromium	EPA 6010	78012	1	5.35		mg/kg	0.128	0.847	10/20	11/03 17:22 KJR (1)	100.
Copper	EPA 6010	78012	1	539.		mg/kg	0.490	0.847	10/20	11/03 17:22 KJR (1)	310.
Lead	EPA 6010	78012	1	250.		mg/kg	0.217	0.424	10/20	11/03 17:22 KJR (1)	100.
Mercury	EPA 7471	78010	1	0.217		mg/kg	0.00150	0.0176	10/20	10/20 16:38 KDG (1)	
Nickel	EPA 6010	78012	1	42.7		mg/kg	0.517	3.39	10/20	11/03 17:22 KJR (1)	160.
Selenium	EPA 6010	78012	1	1.86 J		mg/kg	0.875	2.97	10/20	11/03 17:22 KJR (1)	20.0
Silver	EPA 6010	78012	1	ND		mg/kg	0.154	0.847	10/20	11/03 17:22 KJR (1)	39.0
Thallium	EPA 6010	78012	1	1.17		mg/kg	0.386	0.847	10/20	11/03 17:22 KJR (1)	0.550
Zinc	EPA 6010	78012	1	150.		mg/kg	0.406	1.69	10/20	11/03 17:22 KJR (1)	2300

13 parameters reported

ND denotes Not Detected at or above the reported reporting limit.  
DF denotes Degrees of Freedom of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Q# Note qualifier. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and air denotes not applicable.  
(1a) pH less than 3.0 or greater than 12.5 is hazardous for corrosivity.  
(1b) Flash point less than 140 degrees F is hazardous for ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Rosedale City, (4) Houston, or (5) Laboratory in field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 03004  
Louisiana Dept. of Environmental Quality - 48-0881  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA040023  
Florida Dept. of Health (FELAC) - 227583  
Kansas Dept. of Health Environment - E-10288  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47770

11/17/2006 16:02:33





## Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.459.0333  
Fax: 504.459.0555  
LELAP # 02006

Client ID: W1Client: LEE TECHNICAL SERVICESProject: UPRRSite: NoneLab ID: 20479415Project No.: 2063683Description: NoneMatrix: Water%Moisture: n/aCollected: 10/18/06Received: 10/20/06

Parameter Name	Method	Batch	DF	Result	Qu	Units	Adjusted MDL	Reporting Limit	Prep.	Analysis	Reg. Limit
Antimony	EPA 6010	78035	1	ND		mg/L	0.0111	0.0120	10/23	10/23 13:22 KJR (1)	0.00600
Arsenic	EPA 6010	78035	1	0.0220		mg/L	0.00605	0.0100	10/23	10/23 13:22 KJR (1)	0.0100
Beryllium	EPA 6010	78035	1	0.000820J		mg/L	0.000380	0.00400	10/23	10/23 13:22 KJR (1)	0.00400
Cadmium	EPA 6010	78035	1	ND		mg/L	0.000374	0.00500	10/23	10/23 13:22 KJR (1)	0.00500
Chromium	EPA 6010	78035	1	ND		mg/L	0.00131	0.0100	10/23	10/23 13:22 KJR (1)	0.100
Copper	EPA 6010	78035	1	0.0295		mg/L	0.00318	0.0100	10/23	10/23 13:22 KJR (1)	1.30
Lead	EPA 6010	78035	1	0.0924		mg/L	0.00290	0.00500	10/23	10/23 13:22 KJR (1)	0.0150
Mercury	EPA 7470	77995	1	0.07871		ug/L	0.0111	0.200	10/20	10/20 14:44 KDG (1)	
Nickel	EPA 6010	78035	1	ND		mg/L	0.0286	0.0400	10/23	10/23 13:22 KJR (1)	0.0730
Selenium	EPA 6010	78035	1	ND		mg/L	0.00591	0.0350	10/23	10/23 13:22 KJR (1)	0.0500
Silver	EPA 6010	78035	1	ND		mg/L	0.00150	0.0100	10/23	10/23 13:22 KJR (1)	0.0180
Thallium	EPA 6010	78035	1	ND		mg/L	0.00431	0.00500	10/23	10/23 13:22 KJR (1)	0.00200
Zinc	EPA 6010	78035	1	0.116		mg/L	0.00262	0.0200	10/23	10/23 13:22 KJR (1)	1.10

13 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of test sample. FF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists quality checks. Specific quality checks are defined in the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.  
(1a) pH less than 2.0 or greater than 12.0 is hazardous for corrosivity.  
(1b) Flash point less than 140 degrees F is hazardous for ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) subsistence or field.

11/7/2006 16:02:15  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 03008  
Arkansas Dept. of Environmental Quality - 88-0481  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060013  
Florida Dept. of Health (FDEAC) - E37383  
Kansas Dept. of Health Environment - E-10386  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270



## Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Method: EPA 8260Project: 2063683LCS: 20479441 10/20/2006 3:22:00 PMBatch: 77997MS: 20479442 10/20/2006 5:17:00 PMUnits: ug/LOriginal for MS: 20479415 Client Sample

Parameter Name	LCS Spike	LCS %Rec	LCS D %Rec	LCS RPD	MS Spike	MS %Rec	MS D %Rec	MS RPD	QC Limits LCS	Max MS/MSD	Qu RPD
Aroclor	50	55			50	53	54	2	22 - 165	11 - 171	20 A11
Benzene	50	97			50	98	97	1	70 - 135	60 - 144	20
Bromodichloromethane	50	92			50	99	99	0	61 - 136	59 - 156	20
Bromoform	50	82			50	88	94	7	56 - 154	58 - 153	20
Bromomethane	50	100			50	107	101	6	44 - 158	37 - 165	20
2-Butanone (MEK)	50	48			50	38	42	11	32 - 157	20 - 168	20 A11
Carbon disulfide	50	88			50	97	95	2	40 - 147	36 - 152	20
Carbon tetrachloride	50	100			50	100	98	2	50 - 166	44 - 170	20
Chlorobenzene	50	113			50	115	113	2	73 - 129	67 - 134	20
Chloroethane	50	91			50	110	103	6	38 - 163	34 - 170	20
Chloroform	50	110			50	121	116	4	71 - 133	64 - 140	20
Chloromethane	50	89			50	93	87	7	32 - 149	22 - 163	20
1,2-Dibromo-3-chloropropane	50	65			50	77	81	6	34 - 145	28 - 150	20
Dibromochloromethane	50	89			50	95	95	0	63 - 147	58 - 147	20
1,2-Dichlorobenzene	50	97			50				67 - 135	61 - 139	20
1,3-Dichlorobenzene	50	101			50				69 - 129	66 - 134	20
1,4-Dichlorobenzene	50	102			50				66 - 133	64 - 133	20
1,1-Dichloroethane	50	96			50	104	102	2	64 - 135	59 - 142	20
1,2-Dichloroethane	50	88			50	93	96	3	53 - 164	51 - 161	20
1,1-Dichloroethene	50	103			50	114	111	3	51 - 143	44 - 152	20
cis-1,2-Dichloroethene	50	107			50	116	114	2	59 - 139	56 - 145	20
trans-1,2-Dichloroethene	50	104			50	111	108	3	59 - 139	56 - 145	20
1,2-Dichloropropane	50	92			50	97	96	2	69 - 135	66 - 138	20
cis-1,3-Dichloropropene	50	98			50	103	103	1	66 - 141	58 - 142	20
trans-1,3-Dichloropropene	50	92			50	95	98	3	57 - 150	50 - 151	20
Ethylbenzene	50	107			50	107	105	1	67 - 132	58 - 138	20
Hexachloro-1,3-butadiene	50	89			50				49 - 167	27 - 195	20
Isobutanol	1050	58			1050	66	76	14	32 - 160	26 - 169	20
Methylene chloride	50	114			50	122	121	1	29 - 159	19 - 158	20 A11
4-Methyl-2-pentanone (MIBK)	50	68			50	72	76	6	13 - 162	10 - 157	20
Methyl-tert-butyl ether	50	101			50	68	119	54 *	48 - 145	39 - 157	20
Naphthalene	50	70			50				39 - 140	23 - 148	20
Styrene	50	118			50	122	121	1	71 - 134	54 - 144	20
1,1,1,2-Tetrachloroethane	50	108			50	112	109	3	73 - 146	65 - 150	20
1,1,2,2-Tetrachloroethane	50	77			50	79	83	4	50 - 142	46 - 145	20
Tetrachloroethene	50	165 *			50	114	109	4	42 - 156	39 - 151	20 Q10
Toluene	50	102			50	104	101	3	72 - 132	64 - 139	20
1,2,4-Trichlorobenzene	50	93			50	130	133	2	56 - 144	46 - 149	20
1,1,1-Trichloroethane	50	103			50	111	104	6	65 - 136	59 - 141	20
1,1,2-Trichloroethane	50	87			50	95	95	1	67 - 144	60 - 146	20
Trichloroethene	50	112			50	112	109	3	69 - 136	61 - 141	20
Trichlorofluoromethane	50	108			50	159	147	8	42 - 161	38 - 160	20

\* denotes recovery outside of QC limits.

MS spike concentrations are not corrected for evaporation loss of the spiked sample.

(1) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentration rather than spike recovery.

11/2/2006 14:02:16

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 87008  
Arkansas Dept. of Environmental Quality - 68-0511  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA068033  
Florida Dept. of Health (FLEACH) - E87595  
Kansas Dept. of Health, Environment - 8-10284  
U.S. Dept. of Agriculture, Foreign Soil Permit - 6-47270



## Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.459.0333  
Fax: 504.459.0555  
LELAP # 02006

Method: EPA 8260Project: 2063683LCS: 20479441 10/20/2006 3:22:00 PMBatch: 77997MS: 20479442 10/20/2006 5:17:00 PMUnits: ug/L

Original for MS: 20479415 Client Sample

Parameter Name	LCS	LCS	LCSD	LCS	MS	MS	MSD (1)MS	QC Limits			Min	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec RPD	LCS	MS/MSD	RPD		
Vinyl chloride	50	91			50	97	91 7	40 - 146	28 - 161		20	
m&p-Xylene	100	116			100	114	112 2	70 - 129	66 - 132		20	
o-Xylene	50	111			50	112	111 1	70 - 129	66 - 132		20	

43 temperature reported

\* Analytical recovery results of QC checks.  
MS spike concentrations are not corrected for moisture content of the spiked sample.  
(1) MS RPD is calculated 41.5% RPD value on the basis of spiked sample concentrations rather than spike recovery.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 02-0501  
Louisiana Dept. of Health and Hospitals (DHHS) - LAB0023  
Florida Dept. of Health (FLHCA) - EST008  
Kansas Dept. of Health Environment - E-102106  
U.S. Dept. of Agriculture Foreign Soil Permit - E-473170

11/7/2006 15:02:11



## Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Method: EPA 8260Project: 2053683LCS: 20480132 10/25/2006 10:40:00 PBatch: 78144MS: 20480114 10/25/2006 8:07:00 PMUnits: ug/kg

Original for MS: 20480053 Batch Sample

Parameter Name	LCS Spike	LCS %Rec	LCS %Rec	LCS RPD	MS Spike	MS %Rec	MSD (1)MS %Rec	MSD (1)MS RPD	QC Limits LCS	Max MS/MSD	Qu RPD
Acetone	50	37			50	56	64	14	11 - 166	10 - 183	20 All
Benzene	50	98			50	86	86	0	65 - 136	33 - 143	20
Bromodichloromethane	50	93			50	76	77	2	56 - 157	14 - 155	20
Bromoforn	50	83			50	66	68	3	46 - 156	10 - 152	20
Bromomethane	50	109			50	93	93	1	41 - 159	14 - 162	20
2-Butanone (MEK)	50	57			50	47	51	10	17 - 164	10 - 166	20 All
Carbon disulfide	50	87			50	80	78	2	38 - 150	14 - 148	20
Carbon tetrachloride	50	100			50	88	87	1	44 - 166	17 - 160	20
Chlorobenzene	50	95			50	83	82	2	65 - 134	14 - 145	20
Chloroethane	50	134			50	115	112	3	34 - 166	28 - 158	20
Chloroform	50	98			50	84	84	0	68 - 134	35 - 141	20
Chloromethane	50	122			50	105	105	0	21 - 152	10 - 158	20
1,2-Dibromo-3-chloropropane	50	79			50	64	70	9	23 - 147	10 - 147	20
Dibromochloromethane	50	84			50	69	71	3	53 - 150	10 - 153	20
1,2-Dichlorobenzene	50	88			50	74	74	0	67 - 133	10 - 134	20
1,3-Dichlorobenzene	50	89			50	77	77	1	64 - 132	10 - 131	20
1,4-Dichlorobenzene	50	88			50	77	76	1	64 - 131	10 - 130	20
1,1-Dichloroethane	50	94			50	81	82	1	61 - 135	36 - 141	20
1,2-Dichloroethane	50	89			50	70	74	5	46 - 162	15 - 158	20
1,1-Dichloroethene	50	102			50	91	90	1	50 - 144	31 - 149	20
cis-1,2-Dichloroethene	50	95			50	80	79	1	56 - 142	26 - 140	20
trans-1,2-Dichloroethene	50	96			50	93	87	7	56 - 138	29 - 142	20
1,2-Dichloropropane	50	93			50	77	79	3	64 - 136	28 - 141	20
cis-1,3-Dichloropropene	50	94			50	76	78	2	58 - 142	10 - 145	20
trans-1,3-Dichloropropene	50	87			50	67	70	4	47 - 152	10 - 149	20
Ethylbenzene	50	95			50	88	85	2	62 - 134	11 - 144	20
Hexachloro-1,3-butadiene	50	92			50	59 *	53 *	10	65 - 158	70 - 130	20 QI
Isobutanol	1050	69			1050	56	63	12	14 - 161	10 - 167	20
Methylene chloride	50	108			50	89	87	2	23 - 161	10 - 146	20 All
4-Methyl-2-pentanone (MIBK)	50	78			50	64	68	6	10 - 167	10 - 150	20
Methyl-tert-butyl ether	50	94			50	56	57	1	41 - 150	10 - 151	20
Naphthalene	50	77			50	57	63	11	48 - 133	10 - 191	20
Styrene	50	97			50	82	81	1	64 - 138	10 - 145	20
1,1,1,2-Tetrachloroethane	50	93			50	81	79	2	56 - 154	10 - 162	20
1,1,2,2-Tetrachloroethane	50	81			50	65	65	0	41 - 144	10 - 162	20
Tetrachloroethene	50	95			50	192 *	177	8	30 - 161	10 - 179	20 QI
Toluene	50	95			50	84	83	1	65 - 135	21 - 147	20
1,2,4-Trichlorobenzene	50	77			50	56	57	2	44 - 147	10 - 129	20
1,1,1-Trichloromethane	50	97			50	85	83	2	57 - 139	32 - 144	20
1,1,2-Trichloroethane	50	89			50	69	70	2	59 - 145	13 - 150	20
Trichloroethene	50	99			50	92	90	1	64 - 139	24 - 152	20
Trichlorofluoromethane	50	140			50	119	117	1	39 - 157	20 - 153	20

\* denotes recovery outside of QC limits.  
MS spike concentrations are not corrected for moisture content of the spiked sample.  
(1) MS RPD is calculated via EW-804 rules on the basis of spiked sample concentrations rather than spike recoveries.

11/7/2006 10:00:18  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 81008  
Arkansas Dept. of Environmental Quality - 18-0061  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (FDEH) - EBT003  
Kansas Dept. of Health, Environment - 6-10144  
U.S. Dept. of Agriculture Foreign Soil Permit - 5-47370



# Report of Quality Control

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0555  
 LELAP # 02006

Method: EPA 8260

Project: 2063683

LCS: 20480132 10/25/2006 10:40:00 P

Batch: 78144

MS: 20480114 10/25/2006 8:07:00 PM

Units: ug/kg

Original for MS: 20480053 Batch Sample

Parameter Name	LCS	LCS	LCS	LCS	MS	MS	MSD (1)MS	QC Limits	Max	Qu	
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec RPD	LCS	MS/MSD		RPD
Vinyl chloride	50	122			50	107	105	1	33 - 145	15 - 153	20
m&p-Xylene	100	96			100	86	84	3	60 - 138	10 - 147	20
o-Xylene	50	93			50	82	80	3	62 - 139	10 - 149	20
45 compounds(s) reported											

15 compounds(s) reported

\* Results necessary outside of QC limits.  
 MS spike recoveries are not corrected for moisture content of the spiked sample.  
 (1) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 02006  
 Arkansas Dept. of Environmental Quality - 88-0481  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
 Florida Dept. of Health (FAC) - 227360  
 Kansas Dept. of Health Environment - E-10266  
 U.S. Dept. of Agriculture Foreign Soil Permit - S-47272



## Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.489.0333  
Fax: 504.489.0535  
LELAP # 02006

Method: EPA 8260Project: 2063683LCS: 20480871 10/27/2006 10:12:00 PBatch: 78144

MS:

Units: ug/kg

Original for MS:

Parameter Name	LCS Spike	LCS %Rec	LCS D %Rec	LCS RPD	MS Spike	MS %Rec	MS D %Rec	MS RPD	QC Limits LCS	MS/MSD	Max RPD	Qu
Acetone	50	49							11 - 166	-		All
Benzene	50	94							65 - 136	-		
Bromodichloromethane	50	92							56 - 157	-		
Bromoforn	50	90							46 - 156	-		
Bromomethane	50	109							41 - 159	-		
2-Butanone (MEK)	50	72							17 - 164	-		All
Carbon disulfide	50	85							38 - 150	-		
Carbon tetrachloride	50	95							44 - 166	-		
Chlorobenzene	50	92							65 - 134	-		
Chloroethane	50	113							34 - 166	-		
Chloroform	50	101							68 - 134	-		
Chloromethane	50	120							21 - 152	-		
1,2-Dibromo-3-chloropropane	50	91							23 - 147	-		
Dibromochloromethane	50	88							53 - 150	-		
1,2-Dichlorobenzene	50	88							67 - 133	-		
1,3-Dichlorobenzene	50	89							64 - 132	-		
1,4-Dichlorobenzene	50	90							64 - 131	-		
1,1-Dichloroethane	50	96							61 - 135	-		
1,2-Dichloroethane	50	91							46 - 162	-		
1,1-Dichloroethene	50	101							50 - 144	-		
cis-1,2-Dichloroethene	50	97							56 - 142	-		
trans-1,2-Dichloroethene	50	96							56 - 138	-		
1,2-Dichloropropane	50	92							64 - 136	-		
cis-1,3-Dichloropropene	50	95							58 - 142	-		
trans-1,3-Dichloropropene	50	90							47 - 152	-		
Ethylbenzene	50	94							62 - 134	-		
Hexachloro-1,3-butadiene	50	93							65 - 158	-		
Isobutanol	1050	85							14 - 161	-		
Methylene chloride	50	136							23 - 161	-		All
4-Methyl-2-pentanone (MIBK)	50	86							10 - 167	-		
Methyl-tert-butyl ether	50	65							41 - 150	-		
Naphthalene	50	74							48 - 133	-		
Styrene	50	96							64 - 138	-		
1,1,1,2-Tetrachloroethane	50	95							56 - 154	-		
1,1,2,2-Tetrachloroethane	50	83							41 - 144	-		
Tetrachloroethene	50	95							30 - 161	-		
Toluene	50	93							65 - 135	-		
1,2,4-Trichlorobenzene	50	80							44 - 147	-		
1,1,1-Trichloroethane	50	97							57 - 139	-		
1,1,2-Trichloroethane	50	91							59 - 145	-		
Trichloroethene	50	97							64 - 139	-		
Trichlorofluoromethane	50	116							39 - 157	-		

\* denotes recovery outside of QC limits.

MS spike concentrations are not reported for molecules contained in the spiked sample.

(1) MS RPD is calculated via EW-664 rules on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 03-001  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA000023  
Florida Dept. of Health (FELAC) - 087363  
Kansas Dept. of Health, Environment - E-10206  
U.S. Dept. of Agriculture Foreign Soil Permit - E-22220

11/7/2006 10:12:19



# Report of Quality Control

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0555  
 LELAP # 021006

Method: EPA 8260

Project: 2063683

LCS: 20480871 10/27/2006 10:12:00 P

Batch: 78144

MS:

Units: ug/kg

Original for MS:

Parameter Name	LCS	LCS	LCS	LCS	MS	MS	MSD (1)MS	QC Limits		Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec RPD	LCS	MS/MSD	RPD	
Vinyl chloride	50	119						33 - 145	-		
m&p-Xylene	100	93						60 - 138	-		
o-Xylene	50	91						62 - 139	-		

43 compounds reported

\* denotes recovery outside of QC limits.

MS spike concentrations are not correct all for moisture content of the spiked sample.

(1) MS RPD is calculated via EPA-8260-101 on the basis of spiked sample concentrations rather than spike recoveries.

11/17/2006 16:02:19

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 02008  
 Arkansas Dept. of Environmental Quality - 88-0481  
 Louisiana Dept. of Health and Hospital Services Drinking Water - LA060011  
 Florida Dept. of Health (DEHAC) - E-00000  
 Kansas Dept. of Health Environment - E-00000  
 U.S. Dept. of Agriculture Foreign Soil Permit - E-47179



## Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Method: EPA 8260Project: 2063683LCS: 20480616 10/30/2006 8:16:00 PMBatch: 78240MS: 20480617 10/30/2006 8:54:00 PMUnits: ug/kg

Original for MS: 20479408 Client Sample

Parameter Name	LCS Spike	LCS %Rec	LCS D %Rec	LCS RPD	MS Spike	MS %Rec	MS D %Rec	(1)MS RPD	QC Limits LCS	Max MS/MSD	Qu RPD
Acetone	2500	103			2500	70	84	18	10-197	10-206	20 A11
Benzene	2500	96			2500	100	100	0	64-137	34-153	20
Bromodichloromethane	2500	92			2500	92	93	1	51-155	30-166	20
Bromoform	2500	82			2500	86	81	6	47-146	23-163	20
Bromomethane	2500	104			2500	114	107	7	10-183	10-193	20
2-Butanone (MEK)	2500	110			2500	272 *	268 *	1	10-183	10-219	20 A11,Q1
Carbon disulfide	2500	86			2500	92	92	0	22-167	10-180	20
Carbon tetrachloride	2500	94			2500	99	99	0	43-162	28-168	20
Chlorobenzene	2500	89			2500	96	96	0	66-129	39-145	20
Chloroethane	2500	102			2500	115	115	0	10-200	10-217	20
Chloroform	2500	100			2500	105	104	1	65-134	36-162	20
Chloromethane	2500	93			2500	103	99	4	10-165	10-181	20
Dibromochloromethane	2500	88			2500	89	89	1	54-144	31-159	20
1,1-Dichloroethane	2500	92			2500	101	101	0	62-138	38-161	20
1,2-Dichloroethane	2500	94			2500	95	93	2	49-158	31-172	20
1,1-Dichloroethene	2500	104			2500	111	111	0	31-170	10-188	20
cis-1,2-Dichloroethene	2500	96			2500	101	101	1	61-142	35-167	20
trans-1,2-Dichloroethene	2500	97			2500	108	107	0	51-151	29-165	20
1,2-Dichloropropane	2500	93			2500	95	97	2	60-138	37-157	20
cis-1,3-Dichloropropene	2500	95			2500	95	96	1	57-142	33-157	20
trans-1,3-Dichloropropene	2500	89			2500	89	88	1	47-150	29-158	20 *
Ethylbenzene	2500	88			2500	98	97	1	57-133	21-156	20
Methylene chloride	2500	100			2500	101	99	2	22-170	10-181	20 A11
4-Methyl-2-pentanone (MIBK)	2500	88			2500	214 *	214 *	0	10-156	10-175	20 Q1
Styrene	2500	82			2500	91	90	1	59-137	21-159	20
1,1,2,2-Tetrachloroethane	2500	95			2500	112	112	0	52-142	17-168	20
Tetrachloroethene	2500	84			2500	94	93	1	37-139	10-172	20
Toluene	2500	95			2500	95	94	1	65-133	33-152	20
1,1,1-Trichloroethane	2500	93			2500	103	99	3	61-135	33-158	20
1,1,2-Trichloroethane	2500	92			2500	83	83	1	61-140	31-164	20
Trichloroethene	2500	96			2500	102	101	1	62-136	25-168	20
Vinyl chloride	2500	99			2500	107	103	4	10-174	10-183	20
m,p-Xylene	5000	87			5000	96	95	1	59-136	18-164	20
o-Xylene	2500	86			2500	95	95	0	62-137	18-164	20

34 compounds (MS) reported

\* denotes recovery results of QC Spike.

MS spike recoveries are not corrected for moisture content of the spiked sample.

(1) MS RPD is calculated via 2-Wilds rules on the basis of spiked sample concentrations rather than spike recoveries.

11/7/2006 14:02:19

New Orleans Laboratory Certifications

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - 03-0001

Louisiana Dept. of Health and Hospital / Drinking Water - LA060023

Florida Dept. of Health (DELC) - ERT003

Kansas Dept. of Health, Environment - E-10288

U.S. Dept. of Agriculture Foreign Sell Permit - S-47370





## Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0332  
Fax: 504.469.0555  
LELAP # 02006

Method: EPA 8270Project: 2063683LCS: 20479641 10/27/2006 10:34:00 ABatch: 77879MS: 20478738 10/18/2006 9:47:00 PMUnits: ug/kgOriginal for MS: 20478637 Batch Sample

Parameter Name	LCS Spike	LCS %Rec	LCS %Rec	LCS RPD	MS Spike	MS %Rec	MSD (1)MS %Rec	MSD RPD	QC Limits LCS	Max MS/MSD	Qu RPD
Acenaphthene	1670	73			1930	52	60	10	45 - 110	23 - 121	20
Acenaphthylene	1670	72			1930	62	69	10	48 - 107	27 - 115	20
Aniline	1670	79			1930	83	96	14	50 - 150	50 - 150	20
Anthracene	1670	78			1930	51	60	9	51 - 110	25 - 123	20
Benzo(a)anthracene	1670	76			1930	51	59	5	49 - 112	25 - 123	20
Benzo(b)fluoranthene	1670	80			1930	70	113	19	43 - 119	15 - 140	20
Benzo(k)fluoranthene	1670	82			1930	63	81	14	40 - 121	14 - 138	20
Benzo(a)pyrene	1670	80			1930	56	67	7	48 - 115	20 - 128	20
Butylbenzylphthalate	1670	80			1930	86	99	15	41 - 122	18 - 137	20
4-Chloroaniline	1670	68			1930	84 *	104 *	21 *	10 - 86	10 - 79	20 Q1
bis(2-Chloroethyl) ether	1670	49			1930	39	66	12	38 - 104	21 - 107	20
2-Chloronaphthalene	1670	65			1930	59	64	8	44 - 108	26 - 112	20
2-Chlorophenol	1670	58			1930	68	74	8	38 - 109	24 - 110	20
Chrysene	1670	74			1930	46	58	8	47 - 113	21 - 124	20
Dibenz(a,h)anthracene	1670	83			1930	30	31	2	35 - 127	10 - 122	20
Dibenzofuran	1670	76			1930	62	69	9	46 - 110	21 - 123	20
1,2-Dichlorobenzene	1670	46			1930	65	72	10	36 - 103	13 - 107	20
1,3-Dichlorobenzene	1670	42			1930	61	66	9	33 - 102	10 - 107	20
1,4-Dichlorobenzene	1670	52			1930	62	68	9	32 - 103	10 - 107	20
3,3'-Dichlorobenzidine	1670	71			1930	41	47	12	10 - 111	10 - 117	20
2,4-Dichlorophenol	1670	69			1930	68	73	8	45 - 110	25 - 116	20
Diethylphthalate	1670	89			1930	70	77	9	46 - 113	29 - 115	20
2,4-Dimethylphenol	1670	67			1930	68	73	7	40 - 110	21 - 116	20
Dimethylphthalate	1670	81			1930	67	72	7	47 - 110	30 - 111	20
2,4-Dinitrophenol	1670	103			1930	21	32	43 *	14 - 134	10 - 139	20
2,4-Dinitrotoluene	1670	81			1930	69	75	9	45 - 117	24 - 124	20
2,6-Dinitrotoluene	1670	83			1930	68	75	10	47 - 114	29 - 116	20
Di-n-octylphthalate	1670	85			1930	167	213 *	25 *	36 - 132	10 - 176	20 Q1
bis(2-Ethylhexyl)phthalate	1670	78			1930	81	94	14	41 - 125	14 - 144	20
Fluoranthene	1670	73			1930	0 *	0 *	5	47 - 115	19 - 130	20 Q1
Fluorene	1670	84			1930	61	69	11	46 - 111	24 - 123	20
Hexachloro-1,3-butadiene	1670	56			1930	60	64	6	37 - 110	16 - 114	20
Hexachlorobenzene	1670	86			1930	63	69	9	45 - 114	27 - 117	20
Hexachlorocyclopentadiene	1670	34			1930	0 *	4 *	200 *	21 - 114	10 - 108	20 Q1
Hexachloroethane	1670	54			1930	57	62	9	32 - 104	10 - 114	20
Indeno(1,2,3-cd)pyrene	1670	82			1930	24	25	2	35 - 125	10 - 122	20
Isophorone	1670	70			1930	72	77	6	43 - 110	27 - 113	20
2-Methylnaphthalene	1670	69			1930	70	79	12	44 - 109	17 - 123	20
Naphthalene	1670	57			1930	62	68	7	42 - 103	18 - 115	20
2-Nitroaniline	1670	80			1930	63	69	9	36 - 116	20 - 119	20
3-Nitroaniline	1670	75			1930	67	79	13	17 - 98	10 - 113	20
4-Nitroaniline	1670	85			1930	61	66	8	30 - 120	10 - 127	20

\* denotes recovery outside of QC limits.

MS spike recoveries are not corrected for moisture content of the spiked sample.

(1) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

11/7/2006 10:02:19  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 64-0081  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (FELAC) - ERT 823  
Kansas Dept. of Health, Environment - S-10288  
U.S. Dept. of Agriculture Foreign Sub Panel - S-47270



## Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Method: EPA 8270Project: 2063683LCS: 20479641 10/27/2006 10:34:00 ABatch: 77879MS: 20478738 10/18/2006 9:47:00 PMUnits: ug/kg

Original for MS: 20478637 Batch Sample

Parameter Name	LCS	LCS	LCSD	LCS	MS	MS	MSD (1)MS	QC Limits		Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	LCS	MS/MSD	RPD
Nitrobenzene	1670	56			1930	60	63	5	38 - 109	20 - 114	20
4-Nitrophenol	1670	64			1930	52	66	22 *	30 - 132	10 - 138	20
N-Nitroso-di-n-propylamine	1670	78			1930	78	87	11	37 - 110	18 - 118	20
N-Nitrosodiphenylamine	1670	84			1930	65	68	6	39 - 117	10 - 139	20 A10
2,2'-Oxybis(1-chloropropane)	1670	60			1930	52	56	8	29 - 114	10 - 118	20
Pentachlorophenol	1670	83			1930	47	55	17	28 - 122	10 - 142	20
Phenanthrene	1670	77			1930	0 *	0 *	10	49 - 109	18 - 128	20 Q1
Phenol	1670	62			1930	67	74	11	36 - 112	22 - 113	20
Pyrene	1670	90			1930	23	58	13	45 - 114	10 - 144	20
1,2,4-Trichlorobenzene	1670	56			1930	63	68	8	37 - 108	19 - 112	20
2,4,5-Trichlorophenol	1670	73			1930	60	64	7	45 - 113	25 - 117	20
2,4,6-Trichlorophenol	1670	70			1930	56	58	4	45 - 112	25 - 116	20

54 compounds (1) reported

\* denotes recovery weights of QC limits.  
MS spike recoveries are not reported for volatile content of the spiked sample.  
(1) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - R3004  
Arkansas Dept. of Environmental Quality - 88-0881  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (FHEAC) - E87883  
Kansas Dept. of Health Environment - IS-00288  
U.S. Dept. of Agriculture Foreign Soil Permit - 8-47370

11/20/06 10:32:19



## Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverland Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0335  
LELAP # 02006

Method: EPA 8270Project: 2063683LCS: 20479650 10/24/2006 2:10:00 PMBatch: 77913MS: 20478999 10/19/2006 3:50:00 PMUnits: ug/LOriginal for MS: 20478335 Batch Sample

Parameter Name	LCS	LCS	LCS	LCS	MS	MS	MSD (1)MS	QC Limits		Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	LCS	MS/MSD	RPD	
Acenaphthene	2	77			4	88	74	49 - 111	16 - 140	20	
Acenaphthylene	2	71			4	89	74	39 - 107	30 - 113	20	
Anthracene	2	84			4	94	82	29 - 115	12 - 126	20	
Benzo(a)anthracene	2	59			4	66	61	43 - 107	10 - 125	20	
Benzo(b)fluoranthene	2	51			4	58	53	47 - 113	10 - 138	20	
Benzo(k)fluoranthene	2	61			4	71	63	41 - 121	10 - 134	20	
Benzo(a)pyrene	2	53			4	66	59	25 - 116	10 - 124	20	
Chrysene	2	65			4	72	65	44 - 117	10 - 131	20	
Dibenz(a,h)anthracene	2	49			4	78	68	32 - 119	10 - 126	20	
Fluoranthene	2	62			4	60	54	43 - 120	25 - 129	20	
Fluorene	2	81			4	90	76	49 - 116	30 - 137	20	
Iodeno(1,2,3-cd)pyrene	2	49			4	74	65	37 - 120	10 - 133	20	
2-Methylanthracene	2	66			4	83	69	50 - 150	50 - 150	20	
Naphthalene	2	70			4	88	73	49 - 112	21 - 146	20	
Phenanthrene	2	85			4	94	81	46 - 111	11 - 142	20	
Pyrene	2	66			4	75	66	43 - 111	20 - 119	20	

16 compounds(s) reported

\* Detects recovery outside of QC limits.  
MS spike concentrations are not corrected for moisture content of the spiked sample.  
(1) MS RPD is calculated via SW-846 rules, on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - AS-0581  
Alabama Dept. of Health and Hospitals / Drinking Water - LA06022  
Florida Dept. of Health (HCLAC) - 027805  
Kansas Dept. of Health / Environment - E-10384  
U.S. Dept. of Agriculture / Foreign Soil Permit - S-41270

11/7/2006 16:02:19



## Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Method: EPA 8270Project: 2063683LCS: 20479620 10/25/2006 11:49:00 ABatch: 78032

MS:

Units: ug/L

Original for MS:

Parameter Name	LCS Spike	LCS %Rec	LCS %Rec	LCS RPD	MS Spike	MS %Rec	MSD (1)MS %Rec	MSD RPD	QC Limits LCS	Max MS/MSD	Qu RPD
Acenaphthene	50	82							42 - 113	-	Q5
Acenaphthylene	50	77							41 - 111	-	Q5
Aniline	50	116							50 - 150	-	Q5
Anthracene	50	84							46 - 115	-	Q5
Benzo(a)anthracene	50	79							46 - 117	-	Q5
Benzo(b)fluoranthene	50	85							39 - 129	-	Q5
Benzo(k)fluoranthene	50	92							35 - 132	-	Q5
Benzo(a)pyrene	50	81							40 - 120	-	Q5
Butylbenzylphthalate	50	81							38 - 126	-	Q5
4-Chloroaniline	50	86							10 - 114	-	Q5
bis(2-Chloroethyl) ether	50	74							27 - 113	-	Q5
2-Chloronaphthalene	50	72							41 - 111	-	Q5
2-Chlorophenol	50	76							26 - 115	-	Q5
Chrysene	50	78							45 - 118	-	Q5
Dibenz(a,h)anthracene	50	77							29 - 136	-	Q5
Dibenzofuran	50	79							45 - 113	-	Q5
1,2-Dichlorobenzene	50	70							20 - 99	-	Q5
1,3-Dichlorobenzene	50	63							16 - 96	-	Q5
1,4-Dichlorobenzene	50	66							17 - 97	-	Q5
3,3'-Dichlorobenzidine	50	56							10 - 124	-	Q5
2,4-Dichlorophenol	50	78							36 - 116	-	Q5
Diethylphthalate	50	88							43 - 120	-	Q5
2,4-Dimethylphenol	50	64							18 - 110	-	Q5
Dimethylphthalate	50	81							45 - 116	-	Q5
2,4-Dinitrophenol	50	102							17 - 148	-	Q5
2,4-Dinitrotoluene	50	80							43 - 121	-	Q5
2,6-Dinitrotoluene	50	83							45 - 119	-	Q5
Di-n-octylphthalate	50	94							31 - 140	-	Q5
bis(2-Ethylhexyl)phthalate	50	80							30 - 154	-	Q5
Fluoranthene	50	74							45 - 121	-	Q5
Fluorene	50	86							45 - 116	-	Q5
Hexachloro-1,3-butadiene	50	70							20 - 101	-	Q5
Hexachlorobenzene	50	97							44 - 119	-	Q5
Hexachlorocyclopentadiene	50	14							10 - 60	-	Q5
Hexachloroethane	50	67							15 - 96	-	Q5
Indeno(1,2,3-cd)pyrene	50	76							29 - 131	-	Q5
Isophorone	50	88							38 - 115	-	Q5
2-Methylnaphthalene	50	80							36 - 110	-	Q5
Naphthalene	50	73							32 - 104	-	Q5
2-Nitroaniline	50	82							34 - 120	-	Q5
3-Nitroaniline	50	72							22 - 126	-	Q5
4-Nitroaniline	50	82							26 - 127	-	Q5

\* denotes recovery outside of QC limits.

MS spike concentrations are not correct as the moisture content of the spiked matrix.

(1) MS RPD is calculated via SW-846 using the spike sample concentration rather than spike recovery.

New Orleans Laboratory Certifications

11/7/2006 10:02:19

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - 03-0031

Louisiana Dept. of Health and Hospitals / Drinking Water - LA090022

Florida Dept. of Health (FELAC) - ERT501

Kansas Dept. of Health, Environment - E-10288

U.S. Dept. of Agriculture Forestall Soil Permit - E-47270



# Report of Quality Control

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.459.0332  
 Fax: 504.459.0555  
 LELAP # 02006

Method: EPA 8270

Project: 2063683

LCS: 20479620 10/25/2006 11:49:00 A

Batch: 78032

MS:

Units: ug/L

Original for MS:

Parameter Name	LCS Spike	LCS %Rec	LCS %Rec	LCS RPD	MS Spike	MS %Rec	MSD (1)MS %Rec	MSD (1)MS RPD	QC Limits LCS MS/MSD	Max RPD	Qu
Nitrobenzene	50	79							31 - 118	-	Q5
4-Nitrophenol	50	55							25 - 140	-	Q5
N-Nitroso-di-n-propylamine	50	102							34 - 115	-	Q5
N-Nitrosodiphenylamine	50	86							32 - 115	-	A10,Q5
2,2'-Oxybis(1-chloropropane)	50	87							21 - 123	-	Q5
Pentachlorophenol	50	89							32 - 133	-	Q5
Phenanthrene	50	82							48 - 115	-	Q5
Phenol	50	78							24 - 118	-	Q5
Pyrene	50	94							42 - 119	-	Q5
1,2,4-Trichlorobenzene	50	70							27 - 100	-	Q5
2,4,5-Trichlorophenol	50	74							41 - 120	-	Q5
2,4,6-Trichlorophenol	50	73							39 - 120	-	Q5

Set compound(s) reported

\* denotes recovery outside of QC limits.  
 MS spike concentrations are not corrected for moisture content of the spiked sample.  
 (1) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 02006  
 Arkansas Dept. of Environmental Quality - 00-0001  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA000073  
 Florida Dept. of Health (FDEPH) - 001500  
 Kansas Dept. of Health, Environment & Service - 0-10206  
 U.S. Dept. of Agriculture Foreign Sell Permit - 0-47270



## Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0535  
LELAP # 02006

Report: 2063683Batch: 77879

Lab ID	Type and Qualifier	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20478736	BLANK	95	62	64	56	65	55		
20478737	LCS	97	65	70	61	69	65		
20478738	MS	60	46	57	48	70	75		
20478739	MSD	62	50	64	50	80	88		
20479276	BLANK	74	70	73	62	80	93		
20479277	LCS	100	72	85	68	88	84		
20479408	Sample D2,P	0 D	0 D	0 D	0 D	0 D	0 D		
20479409	Sample	73	54	59	47	71	90		
20479410	Sample D2	67	46	48	44	60	73		
20479411	Sample D2	92	62	67	65	80	162 D		
20479412	Sample D2,P	0 D	0 D	0 D	0 D	0 D	0 D		
20479413	Sample D2,P	0 D	0 D	0 D	0 D	0 D	0 D		
20479414	Sample D2,P	0 D	0 D	0 D	0 D	0 D	0 D		
20479640	BLANK	88	68	71	64	86	76		
20479641	LCS	97	56	40	47	67	80		
QC limits:		10-127	18-116	10-109	10-121	20-107	30-113		
Sur 1: 2,4,6-Tribromophenol (S)					Sur 5: Phenol-d5 (S)				
Sur 2: 2-Fluorobiphenyl (S)					Sur 6: Terphenyl-d14 (S)				
Sur 3: 2-Fluorophenol (S)									
Sur 4: Nitrobenzene-d5 (S)									

\* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered as recovered.

A Lab ID consisting of a batch number with a B suffix is a method blank.

A Lab ID consisting of a batch number with a S suffix is an LCS.

A Lab ID with a MSD suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.

3/17/2006 16:52:20

New Orleans Laboratory Certifications

Louisiana Dept. of Environmental Quality (LELAP) - 93004

Arkansas Dept. of Environmental Quality - 88-0567

Louisiana Dept. of Health and Hospitals / Drinking Water - LA000022

Florida Dept. of Health (FELAC) - 83750

Kansas Dept. of Health - Environment - E-10204

U.S. Dept. of Agriculture Foreign Soil Permit - 5-47376



## Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02906

Report: 2063683Batch: 77913

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20478995	BLANK	76	56	69					
20478996	LCS	86	54	77					
20478999	MS	91	82	94					
20479000	MSD	80	72	82					
20479390	BLANK	81	50	84					
20479391	LCS	88	60	90					
20479415	Sample	74	71	90					
20479649	BLANK	74	51	80					
20479650	LCS	106	76	112					
20481196	BLANK	70	43	60					
20481197	LCS	68	48	58					
QC limits:		36-108	10-120	25-118					

Sur 1: 2-Fluorobiphenyl (S)  
Sur 2: Nitrobenzene-d5 (S)  
Sur 3: Terphenyl-d14 (S)

\* denotes surrogate recovery outside of QC limits.  
B denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an exception.  
A Lab ID consisting of a batch number with a B suffix is a method blank.  
A Lab ID consisting of a batch number with a S suffix is an LCS.  
A Lab ID with a MS suffix is a matrix spike.  
A Lab ID with a MSD suffix is a matrix spike duplicate.

11/7/2006 16:02:50  
New Orleans Laboratory Certifications:  
Louisiana Dept. of Environmental Quality (LELAP) - 02906  
Arkansas Dept. of Environmental Quality - 03-001  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA000013  
Florida Dept. of Health (FDEPH) - E-101  
Kansas Dept. of Health Environment - E-10786  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47210



## Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0332  
Fax: 504.469.0555  
LELAP # 02006

Report: <u>2063683</u>		Batch: <u>77997</u>							
Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20479415	Sample	87	102	92					
20479440	BLANK	96	109	93					
20479441	LCS	85	99	93					
20479442	MS	80	105	93					
20479443	MSD	81	103	92					
QC limits:		71-129	68-124	74-122					
Sur 1: 4-Bromofluorobenzene (S)									
Sur 2: Dibromofluoromethane (S)									
Sur 3: Toluene-d8 (S)									

\* denotes surrogate recovery outside of QC limits.

□ denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered as recovery.

A Lab ID consisting of a batch number with a 5 suffix is a method blank.

A Lab ID consisting of a batch number with a 6 suffix is an LCS.

A Lab ID with a MS suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.

New Orleans Laboratory Certifications:

Louisiana Dept. of Environmental Quality (LELAP) - 07006

Arkansas Dept. of Environmental Quality - 88-0081

Louisiana Dept. of Health and Hospitals / Drinking Water - LA080023

Florida Dept. of Health (DELAQ) - E-17005

Kansas Dept. of Health, Environment - E-10280

U.S. Dept. of Agriculture Foreign Soil Permit - 5-47370

11/7/2006 14:02:20





## Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Report: 2063683Batch: 78032

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20479415	Sample	84	63	40	62	73	82		
20479619	BLANK	90	61	78	55	78	71		
20479620	LCS	106	66	55	68	87	87		
20479803	BLANK	89	79	58	73	70	105		
20479804	LCS	85	81	56	75	72	94		
QC limits:		25-133	36-108	10-109	21-120	15-113	17-130		
Sur 1: 2,4,6-Tribromophenol (S)					Sur 5: Phenol-d5 (S)				
Sur 2: 2-Fluorobiphenyl (S)					Sur 6: Terphenyl-d14 (S)				
Sur 3: 2-Fluorophenol (S)									
Sur 4: Nitrobenzene-d5 (S)									

\* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is within QC limits due to sample dilution, and is not considered an excursion.

A Lab ID consisting of a batch number with a B suffix is a method blank.

A Lab ID consisting of a batch number with a S suffix is an LCS.

A Lab ID with a MS suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.

11/1/2006 16:07:20

New Orleans Laboratory Certifications:  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 88-0881  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA040023  
Florida Dept. of Health (FELAP) - E-77585  
Kansas Dept. of Health Environment - E-10304  
U.S. Dept. of Agriculture Foreign Soil Permit - E-47370



## Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Report: 2063683Batch: 78144

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20479409	Sample	107	96	97					
20479410	Sample D2	90	104	91					
20480053	OQS	110	84	99					
20480112	BLANK	111	105	101					
20480113	LCS	95	92	101					
20480114	MS	95	85	99					
20480115	MSD	96	85	99					
20480131	BLANK	109	102	99					
20480132	LCS	92	92	101					
20480670	BLANK	112	103	100					
20480871	LCS	94	98	100					
QC limits:		55-154	57-136	64-129					
Sur 1: 4-Bromofluorobenzene (S)									
Sur 2: Dibromofluoromethane (S)									
Sur 3: Toluene-d8 (S)									

\* denotes surrogate recovery outside of QC limits.  
D denotes surrogate recovery outside of QC limits due to sample dilution, and is not considered as recovered.  
A Lab ID consisting of a batch number with a B suffix is a method blank.  
A Lab ID consisting of a batch number with a S suffix is an LCS.  
A Lab ID with a MS suffix is a matrix spike.  
A Lab ID with a MSD suffix is a matrix spike duplicate.

11/7/2005 15:02:20  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 02-0061  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060022  
Florida Dept. of Health (FDEHQ) - E27045  
Kansas Dept. of Health, Environment - E-10768  
U.S. Dept. of Agriculture Foreign Soil Permit - 0-47219



## Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70067  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02008

Report: 2063683Batch: 78240

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20479408	Sample P5	96	111	102					
20479411	Sample P5	95	109	101					
20479412	Sample P5	92	107	100					
20479413	Sample P5	87	105	101					
20479414	Sample P5	93	106	101					
20480615	BLANK	110	106	101					
20480616	LCS	103	94	100					
20480617	MS	93	98	103					
20480618	MSD	94	94	102					
QC limits:		45-146	50-137	51-140					
Sur 1: 4-Bromofluorobenzene (S)									
Sur 2: Dibromofluoromethane (S)									
Sur 3: Toluene-d8 (S)									

\* denotes surrogate recovery outside of QC limits.  
B denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an exception.  
A Lab ID consisting of a batch number with a B suffix is a method blank.  
A Lab ID consisting of a batch number with a S suffix is an LCS.  
A Lab ID with a MS suffix is a matrix spike.  
A Lab ID with a MSD suffix is a matrix spike duplicate.

11/10/06 15:02:30  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02008  
Arkansas Dept. of Environmental Quality - 05-001  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA040023  
Florida Dept. of Health (DEHAC) - E07288  
Kansas Dept. of Health Environment - E-00288  
U.S. Dept. of Agriculture Foreign Soil Periodic - 0-47376



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Lab ID: 20479440Description: 8260 VOAs Full List Water BLKProject No.: 2063683Method: EPA 8260Batch: 77997Units: ug/LPrep Factor: 1

Leached:

Prepared: 20-Oct-06Analyzed: 10/20/06 15:02 BMP/LL

CAS Number	Parameter	Dilution	Result	Qc	Reporting Limit
67-64-1	Acetone	1	ND	All	10.0
75-05-8	Acetonitrile	1	ND		100.
107-02-8	Acrolein	1	ND		20.0
107-13-1	Acrylonitrile	1	ND		20.0
107-05-1	Allyl chloride	1	ND		10.0
71-43-2	Benzene	1	ND		5.00
74-97-5	Bromochloromethane	1	ND		5.00
75-27-4	Bromodichloromethane	1	ND		5.00
75-25-2	Bromoform	1	ND		5.00
74-83-9	Bromomethane	1	ND		5.00
78-93-3	2-Butanone (MEK)	1	ND	All	10.0
104-51-8	n-Butylbenzene	1	ND		5.00
115-96-8	sec-Butylbenzene	1	ND		5.00
98-06-6	tert-Butylbenzene	1	ND		5.00
75-15-0	Carbon disulfide	1	ND		5.00
56-23-5	Carbon tetrachloride	1	ND		5.00
106-90-7	Chlorobenzene	1	ND		5.00
75-00-3	Chloroethane	1	ND		5.00
110-75-8	2-Chloroethylvinyl ether	1	ND		20.0
67-66-3	Chloroform	1	ND		5.00
74-87-3	Chloromethane	1	ND		5.00
126-99-8	Chloroprene	1	ND		5.00
95-49-8	2-Chlorotoluene	1	ND		5.00
106-43-4	4-Chlorotoluene	1	ND		5.00
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00
124-48-1	Dibromochloromethane	1	ND		5.00
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00
74-95-3	Dibromomethane	1	ND		5.00
95-50-1	1,2-Dichlorobenzene	1	ND		5.00
541-73-1	1,3-Dichlorobenzene	1	ND		5.00
106-46-7	1,4-Dichlorobenzene	1	ND		5.00
110-57-6	trans-1,4-Dichloro-2-butene	1	ND		5.00
75-71-8	Dichlorodifluoromethane	1	ND		5.00
75-34-3	1,1-Dichloroethane	1	ND		5.00
107-06-2	1,2-Dichloroethane	1	ND		5.00
75-35-4	1,1-Dichloroethene	1	ND		5.00

ND denotes Not Detected at or above the reporting limit.

DL denotes Detection Limit.

RL denotes Reporting Limit.

Qc data quality. Specific quality data are listed at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder CO, (4) Houston, or (5) subsistent at field.

11/02005 16.8223  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02004  
Arkansas Dept. of Environmental Quality - 08-0481  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA000072  
Florida Dept. of Health (FELAP) - E97333  
Kansas Dept. of Health Environment - E-10286  
U.S. Dept. of Agriculture Foreign Soil Permit - 0-47210



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0535  
LELAP # 02008

Lab ID: 20479440Description: 8260 VOAs Full List Water BLKProject No.: 2063683Method: EPA 8260Batch: 77997Units: ug/LPrep Factor: 1

Leached:

Prepared: 20-Oct-06Analyzed: 10/20/06 15:02 RMP(1)

CAS Number	Parameter	Dilution	Result	Qc	Reporting Unit
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00
78-87-5	1,2-Dichloropropane	1	ND		5.00
142-28-9	1,3-Dichloropropane	1	ND		5.00
594-20-7	2,2-Dichloropropane	1	ND		5.00
563-58-6	1,1-Dichloropropene	1	ND		5.00
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00
123-91-1	1,4-Dioxane (p-Dioxane)	1	ND		250
100-41-4	Ethylbenzene	1	ND		5.00
97-63-2	Ethyl methacrylate	1	ND		10.0
591-78-6	2-Hexanone	1	ND		10.0
74-88-4	Iodomethane	1	ND		5.00
78-83-1	Isobutanol	1	ND		250
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00
99-87-6	p-Isopropyltoluene	1	ND		5.00
126-98-7	Methacrylonitrile	1	ND		100
75-09-2	Methylmer chloride	1	1.60	1 A11	5.00
80-62-6	Methyl methacrylate	1	ND		10.0
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00
91-20-3	Naphthalene	1	ND		5.00
107-12-0	Propionitrile	1	ND		20.0
103-65-1	n-Propylbenzene	1	ND		5.00
100-42-5	Styrene	1	ND		5.00
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00
127-18-4	Tetrachloroethene	1	ND		5.00
108-88-3	Toluene	1	ND		5.00
87-61-6	1,2,3-Trichlorobenzene	1	ND		5.00
120-82-1	1,2,4-Trichlorobenzene	1	ND		5.00
71-55-6	1,1,1-Trichloroethane	1	ND		5.00
79-00-5	1,1,2-Trichloroethane	1	ND		5.00
79-01-6	Trichloroethene	1	ND		5.00
75-69-4	Trichlorofluoromethane	1	ND		5.00
96-18-4	1,2,3-Trichloropropane	1	ND		5.00

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes Sample Reporting Limit.

Qc lists qualifiers. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Houma, (4) New Orleans, or (5) not analyzed or full.

11/2/2006 10:40:23

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 09-081  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (FDEA) - E-18383  
Kansas Dept. of Health Environment - E-18386  
U.S. Dept. of Agriculture Foreign Soil Permit - E-47270



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.459.0333  
Fax: 504.459.0555  
LELAP # 02006

Lab ID: 20479440Description: 8260 VOAs Full List Water BLKProject No.: 2063683Method: EPA 8260Batch: 77997Units: ug/LPrep Factor: 1

Leached:

Prepared: 20-Oct-06Analyzed: 10/20/06 15:02 BMP/11

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
526-73-8	1,2,3-Trimethylbenzene	1	ND		5.00
95-63-6	1,2,4-Trimethylbenzene	1	ND		5.00
108-67-8	1,3,5-Trimethylbenzene	1	ND		5.00
108-05-4	Vinyl acetate	1	ND		10.0
75-01-4	Vinyl chloride	1	ND		5.00
	m&p-Xylene	1	ND		5.00
95-47-6	o-Xylene	1	ND		5.00

TV compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit.  
Qu lists qualtiers. Specific qualtiers are defined at the end of the report.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Metairie, or (5) subcontract or field.

11/7/2006 14:02:23  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 89-0891  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA000023  
Florida Dept. of Health (FDEPH) - E-10286  
Kansas Dept. of Health Environment - E-10286  
U.S. Dept. of Agriculture Foreign Soil Permit - E-67273



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Lab ID: 20479619Description: 8270 SVOAs Dual pHProject No.: 2063683Method: EPA 8270Batch: 78032Units: ug/LPrep Factor: 1

Leached:

Prepared: 23-Oct-06Analyzed: 10/25/06 11:23 AM (1)

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
83-32-9	Acenaphthene	1	ND		10.0
208-96-8	Acenaphthylene	1	ND		10.0
62-53-3	Aniline	1	ND		10.0
120-12-7	Anthracene	1	ND		10.0
56-55-3	Benzo(a)anthracene	1	ND		10.0
205-99-2	Benzo(b)fluoranthene	1	ND		10.0
207-08-9	Benzo(k)fluoranthene	1	ND		10.0
65-85-0	Benzoic acid	1	ND		25.0
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0
50-32-8	Benzo(a)pyrene	1	ND		10.0
100-51-6	Benzyl alcohol	1	ND		10.0
92-52-4	Biphenyl (Diphenyl)	1	ND		10.0
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0
85-66-7	Butylbenzylphthalate	1	ND		10.0
86-74-8	Carbazole	1	ND		10.0
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0
106-47-8	4-Chloroaniline	1	ND		10.0
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0
91-58-7	2-Chloronaphthalene	1	ND		10.0
95-57-8	2-Chlorophenol	1	ND		10.0
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0
218-01-9	Chrysene	1	ND		10.0
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0
132-64-9	Dibenzofuran	1	ND		10.0
95-50-1	1,2-Dichlorobenzene	1	ND		10.0
541-73-1	1,3-Dichlorobenzene	1	ND		10.0
106-46-7	1,4-Dichlorobenzene	1	ND		10.0
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0
120-83-2	2,4-Dichlorophenol	1	ND		10.0
84-66-2	Diethylphthalate	1	ND		10.0
105-67-9	2,4-Dimethylphenol	1	ND		10.0
131-11-3	Dimethylphthalate	1	ND		10.0
84-74-2	Di-n-butylphthalate	1	ND		10.0
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0
99-65-0	1,3-Dinitrobenzene	1	ND		10.0

ND denotes Not Detected at or above the reporting level.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Superfund, (3) Boulder City, (4) Houston, or (5) subcontract or field.

11/17/2006 16:01:21

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 03-0005  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA000022  
Florida Dept. of Health (FELAC) - 037882  
Kansas Dept. of Health Environment - 2-10286  
U.S. Dept. of Agriculture Foreign Soil Permit - 5-47270



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.8333  
Fax: 504.469.0535  
LELAP # 02006

Lab ID: 20479619Description: 8270 SVOAs Dual pHProject No.: 2063683Method: EPA 8270Batch: 78032Units: ug/LPrep Factor: 1

Leached:

Prepared: 23-Oct-06Analyzed: 10/25/06 11:23 AM

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
51-28-5	2,4-Dinitrophenol	1	ND		10.0
121-14-2	2,4-Dinitrotoluene	1	ND		10.0
606-20-2	2,6-Dinitrotoluene	1	ND		10.0
117-84-0	Di-n-octylphthalate	1	ND		10.0
88-85-7	Dinoseb	1	ND		10.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0
206-44-0	Fluoranthene	1	ND		10.0
86-73-7	Fluorene	1	ND		10.0
87-68-1	Hexachloro-1,3-butadiene	1	ND		10.0
118-74-1	Hexachlorobenzene	1	ND		10.0
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0
67-72-1	Hexachloroethane	1	ND		10.0
193-39-3	Indene(1,2,3-cd)pyrene	1	ND		10.0
78-39-1	Isophorone	1	ND		10.0
91-57-6	2-Methylnaphthalene	1	ND		10.0
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0
106-44-3	4-Methylphenol (p-Cresol)	1	ND	A7	10.0
91-20-3	Naphthalene	1	ND		10.0
88-74-4	2-Nitroaniline	1	ND		10.0
99-09-2	3-Nitroaniline	1	ND		10.0
106-01-6	4-Nitroaniline	1	ND		10.0
98-95-3	Nitrobenzene	1	ND		10.0
88-75-5	2-Nitrophenol	1	ND		10.0
100-02-7	4-Nitrophenol	1	ND		10.0
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0
86-10-6	N-Nitrosodiphenylamine	1	ND	A10	10.0
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0
87-86-5	Pentachlorophenol	1	ND		10.0
85-01-8	Phenanthrene	1	ND		10.0
108-95-2	Phenol	1	ND		10.0
129-00-0	Pyrene	1	ND		10.0
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0
95-93-4	2,4,5-Trichlorophenol	1	ND		10.0
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0

ND denotes Not Detected at or above the reporting limit.

DT denotes Dilution Factor.

SL denotes Sample Reporting Limit.

Qu Note Qualities. Specific qualities are defined at the end of the report.

Analysis performed by (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) subcontract or SGL.

11/7/2006 10:02:21

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arizona Dept. of Environmental Quality - 02-001  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060037  
Florida Dept. of Health (FELAC) - E27895  
Kansas Dept. of Health - Enforcement - 0-10266  
U.S. Dept. of Agriculture Foreign Soil Permit - 5-47218





# Report of Method Blank

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0555  
 LELAP # 02006

Lab ID: 20479619  
 Description: 8270 SVOAs Dual pH Project No.: 2063683  
 Method: EPA 8270 Batch: 78032 Units: ug/L  
 Prep Factor: 1 Leached: Prepared: 23-Oct-06 Analyzed: 10/25/06 11:23 AM(1)

CAS Number	Parameter	Dilution	Result	Qn	Reporting Limit
72 compounds (0 reported)					

ND denotes Not Detected at or above the reporting limit.  
 DF denotes Dilution Factor.  
 RL denotes Sample Reporting Limit.  
 Qn lists qualifiers. Specific qualifiers are defined at the end of the report.  
 Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) River City, (4) Houston, or (5) subcontract or field.

11/7/2006 16:02:23  
 New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 07006  
 Arkansas Dept. of Environmental Quality - 89-0681  
 Louisiana Dept. of Health and Hospital - Drinking Water - LA060023  
 Florida Dept. of Health (FDELA) - 237203  
 Kansas Dept. of Health Environment - C-10266  
 U.S. Dept. of Agriculture Foreign Soil Permit - S-47270



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Rhineland Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Lab ID: 20479640Description: 8270 SVOAs Low SoilProject No.: 2063683Method: EPA 8270Batch: 77879Units: ug/kgPrep Factor: 1

Leached:

Prepared: 24-Oct-06Analyzed: 10/27/06 10:08 AM (11)

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
83-32-9	Acenaphthene	1	ND		333.
208-96-8	Acenaphthylene	1	ND		333.
98-86-2	Acetophenone	1	ND		333.
53-96-3	2-Acetylaminofluorene	1	ND		333.
92-67-1	4-Aminobiphenyl	1	ND		333.
62-53-3	Aniline	1	ND		333.
120-12-7	Anthracene	1	ND		333.
140-37-8	Aramite	1	ND		333.
56-55-3	Benzo(a)anthracene	1	ND		333.
205-99-2	Benzo(b)fluoranthene	1	ND		333.
207-08-9	Benzo(k)fluoranthene	1	ND		333.
65-85-0	Benzoic acid	1	ND		333.
191-24-2	Benzo(g,h,i)perylene	1	ND		333.
50-32-8	Benzo(e)pyrene	1	ND		333.
100-51-6	Benzyl alcohol	1	ND		333.
92-52-4	Biphenyl (Diphenyl)	1	ND		333.
101-55-3	4-Bromophenylphenyl ether	1	ND		333.
85-68-7	Butylbenzylphthalate	1	ND		333.
86-74-8	Carbazole	1	ND		333.
59-50-7	4-Chloro-3-methylphenol	1	ND		333.
106-47-8	4-Chloroaniline	1	ND		333.
111-93-1	bis(2-Chloroethoxy)methane	1	ND		333.
111-44-4	bis(2-Chloroethyl) ether	1	ND		333.
91-58-7	2-Chloronaphthalene	1	ND		333.
95-57-8	2-Chlorophenol	1	ND		333.
7005-72-3	4-Chlorophenylphenyl ether	1	ND		333.
218-01-9	Chrysene	1	ND		333.
53-70-3	Dibenz(a,h)anthracene	1	ND		333.
132-64-9	Dibenzofuran	1	ND		333.
95-50-1	1,2-Dichlorobenzene	1	ND		333.
541-73-1	1,3-Dichlorobenzene	1	ND		333.
106-46-7	1,4-Dichlorobenzene	1	ND		333.
91-94-1	3,3'-Dichlorobenzidine	1	ND		667.
120-83-2	2,4-Dichlorophenol	1	ND		333.
87-65-0	2,6-Dichlorophenol	1	ND		333.
84-66-2	Dicthylphthalate	1	ND		333.

ND denotes Not Detected at or above the reporting limit.  
DL denotes Dilution Factor.  
RL denotes sample Reporting Limit.  
Qu lists qualitative, specific questions are listed at the end of the report.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Houma City, (4) Houston, or (5) subcontract or field.

New Orleans Laboratory Certification  
Louisiana Dept. of Environmental Quality (LELAP) - 03006  
Arkansas Dept. of Environmental Quality - 88-0881  
Louisiana Dept. of Health and Hospitals Licensing Order - LA000023  
Florida Dept. of Health (FELAC) - EST05  
Kansas Dept. of Health Environment - E-10204  
U.S. Dept. of Agriculture Foreign Soil Permit - 5-47370

11/7/2006 16:02:23



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Lab ID: 20479640Description: 8270 SVOAs Low SoilProject No.: 2063683Method: EPA 8270Batch: 77879Units: µg/kgPrep Factor: 1

Leached:

Prepared: 24-Oct-06Analyzed: 10/27/06 10:08 AM (U)

CAS Number	Parameter	Dilution	Result	Qc	Reporting Limit
60-11-7	P-Dimethylaminoazobenzene	1	ND		333.
57-97-6	7,12-Dimethylbenzo(a)anthracene	1	ND		333.
119-93-7	3,3'-Dimethylbenzidine	1	ND		333.
105-67-9	2,4-Dimethylphenol	1	ND		333.
122-09-8	a,a-Dimethylphenylethylamine	1	ND		333.
131-11-3	Dimethylphthalate	1	ND		333.
84-74-2	Di-n-butylphthalate	1	ND		333.
514-52-1	4,6-Dinitro-2-methylphenol	1	ND		333.
99-65-0	1,3-Dinitrobenzene	1	ND		333.
51-28-5	2,4-Dinitrophenol	1	ND		333.
121-14-2	2,4-Dinitrotoluene	1	ND		333.
606-20-2	2,6-Dinitrotoluene	1	ND		333.
117-84-0	Di-n-octylphthalate	1	ND		333.
86-85-7	Dioxet	1	ND		333.
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		333.
62-50-0	Ethyl methanesulfonate	1	ND		333.
206-44-0	Fluoranthene	1	ND		333.
86-73-7	Fluorene	1	ND		333.
87-68-3	Hexachloro-1,3-butadiene	1	ND		333.
118-74-1	Hexachlorobenzene	1	ND		333.
77-47-4	Hexachlorocyclopentadiene	1	ND		333.
67-72-1	Hexachlorocyclohexane	1	ND		333.
70-30-4	Hexachlorophene	1	ND		3330
1888-71-7	Hexachloropropene	1	ND		333.
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		333.
78-59-1	Isophorone	1	ND		333.
120-58-1	Isosafrole	1	ND		333.
91-80-5	Methapyrene	1	ND		333.
56-49-5	3-Methylcholanthrene	1	ND		333.
66-27-3	Methyl methanesulfonate	1	ND		333.
91-57-6	2-Methylnaphthalene	1	ND		333.
95-48-7	2-Methylphenol (o-Cresol)	1	ND		333.
108-39-4	3-Methylphenol (m-Cresol)	1	ND	A7	333.
106-44-5	4-Methylphenol (p-Cresol)	1	ND	A7	333.
91-20-3	Naphthalene	1	ND		333.
134-32-7	1-Naphthylamine	1	ND		333.

ND denotes Not Detected at or above the reporting limit.

Dil denotes Dilution Factor.

RL denotes rough Reporting Limit.

Qc lists quality control results as defined in the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (5) subcontract or field.

11/2/2006 16:02:33

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 06-0001  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (FELAC) - 067505  
Kansas Dept. of Health Environment - E-50766  
U.S. Dept. of Agriculture Foreign Soil Permit - 0-47370



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Lab ID: 20479640Description: 8270 SYOAs Low SoilProject No.: 2063683Method: EPA 8270Batch: 77879Units: ug/kgPrep Factor: 1

Leached:

Prepared: 24-Oct-06Analyzed: 10/27/06 10:08 AM(1)

CAS Number	Parameter	Dilution	Result	Qc	Reporting Limit
91-59-8	2-Naphthalenamine	1	ND		333.
130-15-4	1,4-Naphthoquinone	1	ND		1670
88-74-4	2-Nitroaniline	1	ND		333.
99-09-2	3-Nitroaniline	1	ND		333.
100-01-6	4-Nitroaniline	1	ND		333.
98-95-3	Nitrobenzene	1	ND		333.
88-75-5	2-Nitrophenol	1	ND		333.
100-02-7	4-Nitrophenol	1	ND		333.
56-57-5	4-Nitroquinoline-n-oxide	1	ND		333.
99-55-8	5-Nitro-o-toluidine	1	ND		333.
55-18-5	N-Nitrosodimethylamine	1	ND		333.
62-75-9	N-Nitrosodimethylamine	1	ND		333.
924-16-3	N-Nitroso-di-n-butylamine	1	ND		333.
621-64-7	N-Nitroso-di-n-propylamine	1	ND		333.
86-30-6	N-Nitrosodiphenylamine	1	ND	A10	333.
10593-95-6	N-Nitrosomethylamine	1	ND		333.
59-89-2	N-Nitrosomorpholine	1	ND		333.
100-75-4	N-Nitrosopiperidine	1	ND		333.
930-53-2	N-Nitrosopyrrolidine	1	ND		333.
108-60-1	2,2'-Chrysis(1-chloropropane)	1	ND		333.
608-93-5	Pentachlorobenzene	1	ND		333.
76-01-7	Pentachloroethane	1	ND		333.
82-68-8	Pentachloronitrobenzene	1	ND		333.
87-86-5	Pentachlorophenol	1	ND		333.
62-44-2	Phenacetin	1	ND		333.
85-01-8	Phenanthrene	1	ND		333.
108-95-2	Phenol	1	ND		333.
106-50-3	p-Phenylenediamine	1	ND		333.
109-06-8	2-Picoline	1	ND		333.
23950-58-5	Promide	1	ND		333.
129-00-0	Pyrene	1	ND		333.
110-86-1	Pyridine	1	ND		333.
94-59-7	Safrole	1	ND		333.
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		333.
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		333.
95-53-4	O-Toluidine	1	ND		333.

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qc lists qualifiers. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Shreveport, (4) Houston, or (5) subcontract or field.

New Orleans Laboratory Certifications

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - 88-0881

Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023

Florida Dept. of Health (FELAC) - 187369

Kansas Dept. of Health Environment - E-10208

U.S. Dept. of Agriculture Foreign Soil Permit - S-47370

11/7/2006 10:02:33



# Report of Method Blank

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd, Suite F  
 St. Rose, LA 70087  
 Phone: 504.489.6333  
 Fax: 504.489.0555  
 LELAP # 02008

Lab ID: 20479640  
 Description: 8270 SVOAs Low Soil Project No.: 2063683  
 Method: EPA 8270 Batch: 77879 Units: ug/kg  
 Prep Factor: 1 Leached: Prepared: 24-Oct-06 Analyzed: 10/27/06 10:08 AM (1)

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
120-82-1	1,2,4-Trichlorobenzene	1	ND		333.
95-95-4	2,4,5-Trichlorophenol	1	ND		333.
88-06-2	2,4,6-Trichlorophenol	1	ND		333.
99-35-4	1,3,5-Trinitrobenzene	1	ND		333.

112 compounds reported

ND denotes Not Detected at or above the reporting limit.  
 Df denotes Dilution Factor.  
 Qu denotes sample Reporting Limit.  
 Qu also qualifies. Specific qualifiers are defined at the end of the report.  
 Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) in contract or field.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 02008  
 Arkansas Dept. of Environmental Quality - 88-0881  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA080073  
 Florida Dept. of Health (FDEAC) - E-17185  
 Kansas Dept. of Health - E-10206  
 U.S. Dept. of Agriculture Foreign Soil Permit - S-47370

11/7/2006 10:01:23



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Lab ID: 20479649Description: 8270 SVOAs SIM WaterProject No.: 20636R3Method: EPA 8270Batch: 77913Units: ug/LPrep Factor: 1

Leached:

Prepared: 23-Oct-06Analyzed: 10/24/06 13:43 (024.1)

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
83-32-9	Acenaphthene	1	ND		0.100
208-96-8	Acenaphthylene	1	ND		0.100
120-12-7	Anthracene	1	ND		0.100
56-55-3	Benzo(a)anthracene	1	ND		0.100
205-99-2	Benzo(b)fluoranthene	1	ND		0.100
207-08-9	Benzo(k)fluoranthene	1	ND		0.100
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100
50-32-8	Benzo(a)pyrene	1	ND		0.100
218-01-9	Chrysene	1	ND		0.100
53-70-3	Dibenzo(a,h)anthracene	1	ND		0.100
206-44-0	Fluoranthene	1	ND		0.100
86-73-7	Fluorene	1	ND		0.100
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100
90-12-6	1-Methylnaphthalene	1	ND		0.100
91-57-6	2-Methylnaphthalene	1	ND		0.100
91-20-3	Naphthalene	1	ND		0.100
85-01-8	Phenanthrene	1	ND		0.100
129-00-0	Pyrene	1	ND		0.100

18 compounds(0) reported

ND denotes Not Detected at or above the reporting limit.

RF denotes Dilution Factor.

EL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Kenner City, (4) Houston, or (5) in-house test as noted.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 00-001  
Louisiana Dept. of Health and Hospitals / Drinking Water - LAB00023  
Florida Dept. of Health (FELAC) - E-17185  
Kansas Dept. of Health Environment - E-10386  
U.S. Dept. of Agriculture Foreign Soil Permit - E-47270

11/1/2006 14:02:23



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverland Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Lab ID: 20480131Description: 8260 VOAs Full List Low, BLKProject No.: 2063683Method: EPA 8260Batch: 78144Units: ug/kgPrep Factor: 1

Leached:

Prepared: 25-Oct-06Analyzed: 10/25/06 22:21 DEL(1)

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
67-64-1	Acetone	1	ND	All	10.0
71-43-2	Benzene	1	ND		5.00
75-27-4	Bromodichloromethane	1	ND		5.00
75-25-2	Bromoform	1	ND		5.00
74-83-9	Bromomethane	1	ND		5.00
78-93-3	2-Butanone (MEK)	1	ND	All	10.0
75-15-0	Carbon disulfide	1	ND		5.00
56-23-5	Carbon tetrachloride	1	ND		5.00
108-90-7	Chlorobenzene	1	ND		5.00
75-00-3	Chloroethane	1	ND		5.00
67-66-3	Chloroform	1	ND		5.00
74-87-3	Chloromethane	1	ND		5.00
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00
124-48-1	Dibromochloromethane	1	ND		5.00
75-34-3	1,1-Dichloroethane	1	ND		5.00
107-06-2	1,2-Dichloroethane	1	ND		5.00
75-35-4	1,1-Dichloroethene	1	ND		5.00
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00
78-87-5	1,2-Dichloropropane	1	ND		5.00
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00
100-41-4	Ethylbenzene	1	ND		5.00
591-78-6	2-Hexanone	1	ND		10.0
78-83-1	Isobutanol	1	ND		250.
75-09-2	Methylene chloride	1	ND	All	5.00
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00
100-42-5	Styrene	1	ND		5.00
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00
127-18-4	Tetrachloroethene	1	ND		5.00
108-88-3	Toluene	1	ND		5.00
120-82-1	1,2,4-Trichlorobenzene	1	ND		5.00
71-55-6	1,1,1-Trichloroethane	1	ND		5.00
79-00-5	1,1,2-Trichloroethane	1	ND		5.00

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (5) subcontract or field.

11/22/06 16:02:23

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 88-0681  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (FELAC) - E87385  
Kansas Dept. of Health Environment - E-50206  
U.S. Dept. of Agriculture Foreign Soil Permit - 8-47278



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0535  
LELAP # 02006

Lab ID: 20480131  
Description: 8260 VOAs Full List Low, BLK Project No.: 2063683  
Method: EPA 8260 Batch: 78144 Units: ug/kg  
Prep Factor: 1 Lenched: Prepared: 25-Oct-06 Analyzed: 10/25/06 22:21 DET(1)

CAS Number	Parameter	Dilution	Result	Qc	Reporting Limit
79-01-6	Trichloroethene	1	ND		5.00
75-69-4	Trichlorofluoromethane	1	ND		5.00
75-01-4	Vinyl chloride	1	ND		5.00
	m&p-Xylene	1	0.690 J		5.00
95-47-6	o-Xylene	1	ND		5.00

41 compounds did not report

ND denotes Not Detected at or above the reporting limit.  
DP denotes Dilution Factor.  
RL denotes Sample Reporting Limit.  
Qc lists qualifications. Specific qualifications are defined at the end of the report.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (5) subsequent to field.

11/9/2006 16:07:23  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 88-0681  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (FLEHQS) - E17583  
Kansas Dept. of Health - Environment - E-10284  
U.S. Dept. of Agriculture Foreign Soil Permit - 2-47270





## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Lab ID: 20480615

Description: 8260 VOAs Med Soil Full BLK

Project No.: 2063683

Method: EPA 8260

Batch: 78240

Units: ug/kg

Prep Factor: 1

Leached:

Prepared: 27-Oct-06

Analyzed: 10/30/06 19:55 DET(1)

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
67-64-1	Acetone	1	ND	All	500.
71-43-2	Benzene	1	ND		250.
75-27-4	Bromodichloromethane	1	ND		250.
n/a		1	0.965		
75-25-2	Bromoform	1	ND		250.
74-83-9	Bromomethane	1	ND		250.
78-93-3	2-Butanone (MEK)	1	ND	All	500.
15892-23-6	sec-Butyl alcohol	1	ND		10000
75-15-0	Carbon disulfide	1	ND		250.
56-23-5	Carbon tetrachloride	1	ND		250.
108-90-7	Chlorobenzene	1	ND		250.
75-00-3	Chloroethane	1	ND		250.
67-66-3	Chloroform	1	ND		250.
74-87-3	Chloromethane	1	ND		250.
110-82-7	Cyclohexane	1	ND		250.
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		250.
124-48-1	Dibromochloromethane	1	ND		250.
75-34-3	1,1-Dichloroethane	1	ND		250.
107-06-2	1,2-Dichloroethane	1	ND		250.
75-35-4	1,1-Dichlorobenzene	1	ND		250.
156-59-2	cis-1,2-Dichloroethene	1	ND		250.
156-60-5	trans-1,2-Dichloroethene	1	ND		250.
78-87-5	1,2-Dichloropropane	1	ND		250.
10061-01-5	cis-1,3-Dichloropropene	1	ND		250.
10061-02-6	trans-1,3-Dichloropropene	1	ND		250.
100-41-4	Ethylbenzene	1	ND		250.
110-54-3	n-Hexane	1	ND		250.
78-83-1	Isobutanol	1	ND		12500
98-82-8	Isopropylbenzene (Cumene)	1	ND		250.
75-09-2	Methylene chloride	1	51.5	All	250.
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		500.
1634-04-4	Methyl-tert-butyl ether	1	ND		250.
100-42-5	Styrene	1	ND		250.
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		250.
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		250.
127-18-4	Tetrachloroethene	1	ND		250.

ND denotes Not Detected at or above the reporting limit.

RP denotes Reporting Factor.

RL denotes Reporting Limit.

Qu denotes Quantification. Specific quantification is displayed at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bayou City, (4) Houston, or (5) subcontract or field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 04-001  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060011  
Florida Dept. of Health (FDEAC) - E02100  
Kansas Dept. of Health Environment - E-10306  
U.S. Dept. of Agriculture Foreign Soil Permit - 5-47370

11/17/2006 14:00:13



# Report of Method Blank

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd, Suite F  
 St. Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0553  
 LELAP # 02006

Lab ID: 20480615

Description: 8260 VOAs Med Soil Full BLK

Project No.: 2063683

Method: EPA 8260

Batch: 78240

Units: µg/kg

Prep Factor: 1

Leached:

Prepared: 27-Oct-06

Analyzed: 10/30/06 19:55 DET(1)

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
108-88-3	Toluene	1	108.	1	250.
120-82-1	1,2,4-Trichlorobenzene	1	ND		250.
71-55-6	1,1,1-Trichloroethane	1	ND		250.
79-00-5	1,1,2-Trichloroethane	1	ND		250.
79-01-6	Trichloroethene	1	ND		250.
75-69-4	Trichlorofluoromethane	1	ND		250.
95-63-6	1,2,4-Trimethylbenzene	1	ND		250.
75-01-4	Vinyl chloride	1	ND		250.
	m&p-Xylene	1	ND		250.
95-47-6	o-Xylene	1	ND		250.

44 compounds reported

ND - Analyte Not Detected at or above the reporting limit.  
 DF - Dilution Factor.  
 RL - Analyte Sample Reporting Limit.  
 Qu - Quota qualifier. Specific qu-letters are defined at the end of the report.  
 Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Houma, (4) Houston, or (5) in contract or field.

11/1/2006 14:02:21  
 New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 82008  
 Arkansas Dept. of Environmental Quality - 82-0881  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA000023  
 Florida Dept. of Health (DEHAC) - 27705  
 Kansas Dept. of Health Environment - E-10268  
 U.S. Dept. of Agriculture Foreign Soil Permit - E-47276



# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.489.0233  
Fax: 504.489.0555  
LELAP # 02006

Lab ID: 20480870  
Description: 8260 VOAs Full List Low, BLK Project No.: 2063683  
Method: EPA 8260 Batch: 78144 Units: ug/kg  
Prep Factor: 1 Leached: Prepared: 27-Oct-06 Analyzed: 10/27/06 21:49 RME/11

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
67-64-1	Acetone	1	ND	All	10.0
71-43-2	Benzene	1	ND		5.00
75-27-4	Bromodichloromethane	1	ND		5.00
75-25-2	Bromoform	1	ND		5.00
74-83-9	Bromomethane	1	ND		5.00
78-93-3	2-Butanone (MEK)	1	ND	All	10.0
75-15-0	Carbon disulfide	1	ND		5.00
56-23-5	Carbon tetrachloride	1	ND		5.00
108-90-7	Chlorobenzene	1	ND		5.00
75-00-3	Chloroethane	1	ND		5.00
67-66-3	Chloroform	1	ND		5.00
74-87-3	Chloromethane	1	ND		5.00
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00
124-48-1	Dibromochloromethane	1	ND		5.00
75-34-3	1,1-Dichloroethane	1	ND		5.00
107-06-2	1,2-Dichloroethane	1	ND		5.00
75-35-4	1,1-Dichloroethene	1	ND		5.00
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00
78-87-5	1,2-Dichloropropane	1	ND		5.00
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00
100-41-4	Ethylbenzene	1	ND		5.00
591-78-6	2-Hexanone	1	ND		10.0
78-83-1	Isobutanol	1	ND		250.
75-09-2	Methylene chloride	1	1.70 J	All	5.00
101-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00
100-42-5	Styrene	1	ND		5.00
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00
127-18-4	Tetrachloroethene	1	ND		5.00
108-88-3	Toluene	1	ND		5.00
120-82-1	1,2,4-Trichlorobenzene	1	ND		5.00
71-55-6	1,1,1-Trichloroethane	1	ND		5.00
79-00-5	1,1,2-Trichloroethane	1	ND		5.00

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

On this condition, specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) subcontract or field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 83-0387  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA000023  
Florida Dept. of Health (FLEA) - 187303  
Kansas Dept. of Health, Environment - E-10286  
U.S. Dept. of Agriculture Foreign Soil Permit - 5-47270

10/27/2006 16:02:23



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02005

Lab ID: 20480870  
Description: 8260 VOAs Full List Low, BLK Project No.: 2063683  
Method: EPA 8260 Batch: 78144 Units: ug/kg  
Prep Factor: 1 Leached: Prepared: 27-Oct-06 Analyzed: 10/27/06 21:49 RME:11

CAS Number	Parameter	Dilution	Result	Qs	Reporting Limit
79-01-6	Trichloroethene	1	ND		5.00
75-69-4	Trichlorofluoromethane	1	ND		5.00
75-01-4	Vinyl chloride	1	ND		5.00
	m,p-Xylene	1	ND		5.00
95-47-6	o-Xylene	1	ND		5.00

41 compounds reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit.  
Qs lists qualifiers. Specific qualifiers are located at the end of the report.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (5) Jacksonville or Field.

11/7/2006 16:02:23  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02005  
Arkansas Dept. of Environmental Quality - 88-0081  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA000023  
Florida Dept. of Health (FELAP) - EAT 003  
Kansas Dept. of Health - Environment - E-50208  
U.S. Dept. of Agriculture Foreign Soil Permit - 9-47370



# Report of Quality Control

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.489.0333  
 Fax: 504.489.0555  
 LELAP # 07006

Method: <u>EPA 8015 Modified</u>				Project: <u>2063683</u>				LCS: <u>20479652</u> <u>10/27/2006 5:44:00 PM</u>				
				Batch: <u>77855</u>				MS: <u>20478649</u> <u>10/24/2006 3:52:00 PM</u>				
				Units: <u>mg/L</u>				Original for MS: 20478173 Batch Sample				
Parameter Name	LCS Spike	LCS %Rec	LCS %Rec	LCS RPD	MS Spike	MS %Rec	MSD (U)MS %Rec	RPD	QC Limits LCS	MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-28)	0.4	52			0.8	0 *	0 *	57 *	40 - 143	10 - 171	20	Q1
1 compound(s) reported												

\* denotes recovery outside of QC limits.  
 MS spike concentrations are not corrected for moisture content of the spiked sample.  
 (1) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 07006  
 Arkansas Dept. of Environmental Quality - 88-0681  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA060021  
 Florida Dept. of Health (FDEPH) - 107303  
 Kansas Dept. of Health, Environment - E-10188  
 U.S. Dept. of Agriculture Foreign Soil Permit - E-47370

11/7/2006 14:52:25



# Report of Quality Control

Pace Analytical Services, Inc.  
 1000 Riverland Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0555  
 LELAP # 02006

Method: <u>EPA 8015 Modified</u>	Project: <u>2063683</u>				LCS: <u>20479643</u> <u>10/27/2006 2:24:00 PM</u>							
	Batch: <u>77953</u>				MS: <u>20479274</u> <u>10/26/2006 7:46:00 PM</u>							
	Units: <u>mg/kg</u>				Original for MS: 20478327 Batch Sample							
Parameter Name	LCS Spike	LCS %Rec	LCS/D %Rec	LCS RPD	MS Spike	MS %Rec	MS/D %Rec	(1)MS RPD	QC Limits LCS	MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-28)	40	60			44	57	65	6	55 - 140	10 - 174	20	
1 temperature(s) reported												

\* denotes recovery outside of QC limits.  
 MS spike concentrations are not corrected for moisture content of the spiked sample.  
 (1) MS RPD is calculated via SW-846 rules as the ratio of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 02006  
 Arkansas Dept. of Environmental Quality - 82-0687  
 Louisiana Dept. of Health and Hospitals - Drinking Water - LA060623  
 Florida Dept. of Health (FDEALC) - 017385  
 Kansas Dept. of Health Environment - K-10286  
 U.S. Dept. of Agriculture Foreign Sell Permit - S-47275

11/07/2006 10:02:25



# Report of Quality Control

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd, Suite F  
 SL Ross, LA 70087  
 Phone: 504.459.0333  
 Fax: 504.459.0555  
 LELAP # 02006

Method: EPA 8015 Modified

Project: 2063683

LCS: 20479713 10/23/2006 2:42:00 PM

Batch: 78052

MS: 20479742 10/24/2006 6:52:00 PM

Units: mg/kg

Original for MS: 20479409 Client Sample

Parameter Name	LCS Spike	LCS %Rec	LCS %Rec	LCS RPD	MS Spike	MS %Rec	MS %Rec	MSD (1)MS RPD	QC Limits LCS MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-10) 1 compound(s) reported	25	104			25	53	48	6	70 - 146	20 - 156	20

\* Assumes recovery outside of QC Range.  
 MS spike concentrations are not correct for moisture content of the spiked sample.  
 (1) MS RPD is calculated via SW-846 policy on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - #2006  
 Arkansas Dept. of Environmental Quality - #2-0167  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
 Florida Dept. of Health (FELAC) - ERT555  
 Kansas Dept. of Health Environment - E-16206  
 U.S. Dept. of Agriculture Foreign Soil Permit - #-47379



# Report of Quality Control

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd, Suite F  
 St. Rose, LA 70087  
 Phone: 504.468.0333  
 Fax: 504.468.0335  
 LELAP #: 02006

Method: <u>EPA 8015 Modified</u>				Project: <u>2063683</u>		LCS: <u>20480493</u>		<u>10/27/2006 1:32:00 PM</u>			
				Batch: <u>78193</u>		MS: <u>20480368</u>		<u>10/26/2006 5:27:00 PM</u>			
				Units: <u>mg/L</u>		Original for MS: 20479585 Batch Sample					
Parameter Name	LCS Spike	LCS %Rec	LCS %Rec	LCS RPD	MS Spike	MS %Rec	MSD (1)MS %Rec	MSD (1)MS RPD	QC Limits LCS MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-10) 3 compounds(s) reported	0.5	101			0.5	90	94	3	69 - 152	40 - 153	20

\* doubles recovery outside of QC limits.  
 MS spike chemical ratios are not corrected for moisture content of the spiked sample.  
 (1) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 02006  
 Arkansas Dept. of Environmental Quality - 88-0481  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA040623  
 Florida Dept. of Health (FDEAC) - E97868  
 Kansas Dept. of Health Environment - 6-10246  
 U.S. Dept. of Agriculture Foreign Soil Permit - S-27810





# Report of Quality Control

Pace Analytical Services, Inc.  
 1900 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0555  
 LELAP # 02006

Method: EPA 8082

Project: 2063683

LCS: 20479663 10/30/2006 10:28:00 A

Batch: 77402

MS: 20476100 10/4/2006 10:29:00 AM

Units: ug/kg

Original for MS: 20475887 Batch Sample

Parameter Name	LCS	LCS	LCS	LCS	MS	MS	MSD (I)MS	QC Limits		Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec RPD	LCS	MS/MSD	RPD	
PCB-1016 (Aroclor 1016)	333	90			333	51	58 14	46 - 129	10 - 144	20	
PCB-1260 (Aroclor 1260)	333	92			333	96	77 21 *	46 - 137	12 - 148	20	

\* compound(s) reported

\* denotes recovery outside of QC limits.  
 MS spike concentrations are not correct if the molecule comes of the spiked sample.  
 (I) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 03008  
 Arkansas Dept. of Environmental Quality - 24-0861  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA060012  
 Florida Dept. of Health (FDEAC) - E-27583  
 Kansas Dept. of Health Environment - E-10298  
 U.S. Dept. of Agriculture Foreign Soil Permit - E-47219

11/17/2006 14:02:23



# Report of Quality Control

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd, Suite F  
 St. Rose, LA 70087  
 Phone: 504.489.0333  
 Fax: 504.489.0533  
 LEIAP # 02006

Method: <u>EPA 8082</u>	Project: <u>2063683</u>				LCS: <u>20479637</u>		<u>10/26/2006 6:07:00 PM</u>				
	Batch: <u>78037</u>				MS: <u>20479638</u>		<u>10/26/2006 6:37:00 PM</u>				
	Units: <u>µg/L</u>				Original for MS: 20479415 Client Sample						
Parameter Name	LCS Spike	LCS %Rec	LCS %Rec	LCS RPD	MS Spike	MS %Rec	MSD (1)MS %Rec	MSD RPD	QC Limits LCS	Max MS/MSD	Qu RPD
PCB-1016 (Aroclor 1016)	10	72			20	91	93	3	43 - 143	33 - 146	20
PCB-1260 (Aroclor 1260)	10	61			20	76	80	5	45 - 138	36 - 141	20
2 additional sample(s) reported											

1 compound(s) reported

\* denotes recovery variable of QC results.  
 MS spike concentrations are not corrected for moisture content of the spiked sample.  
 (1) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LEIAP) - 02006  
 Arkansas Dept. of Environmental Quality - 88-0881  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA060071  
 Florida Dept. of Health (FDEAC) - 037305  
 Kansas Dept. of Health / Environment - E-10266  
 U.S. Dept. of Agriculture / Foreign Sell Permit - 8-47179

11/7/2006 16:03:21



# Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70067  
 Phone: 504.469.0333  
 Fax: 504.469.0555  
 LELAP # 02006

Report: 2063683 Batch: 77402

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20476098	BLANK	87	90	80	95				
20476099	LCS	98	93	80	81				
20476100	MS GI	331 *	26	312 *	61				
20476101	MSD GI	163 *	64	132	58				
20478803	BLANK	108	111	99	110				
20478804	LCS	121	113	94	98				
20479408	Sample D2	71	68	0 D	61				
20479409	Sample GI	91	94	740 *	80				
20479410	Sample D2	125	107	0 D	62				
20479411	Sample D2,G	123	91	621 D	79				
20479412	Sample D2,G	100	119	14600 D	53				
20479413	Sample D2,G	77	88	3220 D	76				
20479414	Sample D2,G	70	66	1410 D	58				
20479662	BLANK	110	113	99	110				
20479663	LCS	117	116	102	109				
QC limits:		30-150	15-172	30-150	10-151				
Sur 1: Decachlorobiphenyl (Conf)(S) Sur 2: Decachlorobiphenyl (S) Sur 3: Tetrachloro-m-xylene (Conf)(S) Sur 4: Tetrachloro-m-xylene (S)									

\* denotes surrogate recovery outside of QC limits.  
 D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an exception.  
 A Lab ID consisting of a batch number with a B suffix is a method blank.  
 A Lab ID consisting of a batch number with a G suffix is an LCS.  
 A Lab ID with a MS suffix is a matrix spike.  
 A Lab ID with a MSD suffix is a matrix spike duplicate.

11/17/2006 16:02:25  
 New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LDEQ) - 62008  
 Arkansas Dept. of Environmental Quality - 68-0061  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA060027  
 Florida Dept. of Health (DEH) - C81325  
 Kansas Dept. of Health Environment - E-10206  
 U.S. Dept. of Agriculture Foreign Soil Permit - 5-47278



# Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0535  
LELAP # 02008

Report: 2063683

Batch: 77855

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20478647	BLANK	49	60						
20478648	LCS	58	63						
20478649	MS	74	63						
20478650	MSD	74	66						
20479415	Sample	111	106						
20479451	BLANK	86	78						
20479652	LCS	81	76						
QC limits:		14-169	36-142						
Sur 1: n-Pentacosane (S)									
Sur 2: o-Terphenyl (S)									

\* denotes surrogate recovery outside of QC limits.  
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.  
A Lab ID consisting of a batch number with a B suffix is a method blank.  
A Lab ID consisting of a batch number with a S suffix is an LCS.  
A Lab ID with a MS suffix is a matrix spike.  
A Lab ID with a MSD suffix is a matrix spike duplicate.

11/22/06 16:03:23  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02008  
Arkansas Dept. of Environmental Quality - 88-0051  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (DEHAC) - 37005  
Kansas Dept. of Health Environment - E-10268  
U.S. Dept. of Health and Human Services Foreign Sell Permit - 5-41278



## Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rosa, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Report: 2063683Batch: 77953

Lab ID	Type and Qualifier	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20479274	MS	92	91						
20479275	MSD	94	96						
20479408	Sample D1	28	362 D						
20479409	Sample	93	96						
20479410	Sample	85	81						
20479411	Sample D1	88	69						
20479412	Sample D1	88	33 D						
20479413	Sample D1	6 D	27 D						
20479414	Sample D1	48	15 D						
20479642	BLANK	78	79						
20479643	LCS	70	72						
20480073	BLANK	88	94						
20480074	LCS	93	98						

QC limits: 22-165 42-146

Sur 1: n-Pentacosane (S)

Sur 2: o-Terphenyl (S)

\* denotes surrogate recovery outside of QC limits.  
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an exception.  
A Lab ID consisting of a batch number with a B suffix is a method blank.  
A Lab ID consisting of a batch number with a S suffix is an LCS.  
A Lab ID with a MS suffix is a matrix spike.  
A Lab ID with a MSD suffix is a matrix spike duplicate.

11/2/2006 14:07:24  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 63006  
Arkansas Dept. of Environmental Quality - 88-0481  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (DEIAC) - E87392  
Kansas Dept. of Health Environment - 6-10284  
U.S. Dept. of Agriculture Foreign Sale Permit - 6-47270



# Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0355  
 LELAP # 02006

Report: <u>2063683</u>		Batch: <u>78037</u>							
Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20479415	Sample	83	83	157	70				
20479636	BLANK	86	78	72	70				
20479637	LCS	87	76	68	64				
20479638	MS	102	94	87	80				
20479639	MSD	95	93	95	76				
QC Limits:		10-157	10-157	18-171	18-171				
Sur 1: Decachlorobiphenyl (Conf)(S)									
Sur 2: Decachlorobiphenyl (S)									
Sur 3: Tetrachloro-m-xylene (Conf)(S)									
Sur 4: Tetrachloro-m-xylene (S)									

\* denotes surrogate recovery outside of QC limits.  
 ID denotes surrogate recovery to outside of QC limits due to sample dilution, and is not considered an expansion.  
 A Lab ID consisting of a batch number with a B suffix is a method blank.  
 A Lab ID consisting of a batch number with a S suffix is an LCS.  
 A Lab ID with a MS suffix is a matrix spike.  
 A Lab ID with a MSD suffix is a matrix spike duplicate.

11/2006 16 0128  
 New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 07004  
 Arkansas Dept. of Environmental Quality - 09-001  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA040023  
 Florida Dept. of Health (FELAP) - 07883  
 Kansas Dept. of Health Environment - 0-1070  
 U.S. Dept. of Agriculture Foreign Soil Permit - 0-47378



## Report of Batch Surrogate Recovery

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.489.0333  
 Fax: 504.489.0555  
 LELAP # 02006

Report: 2063683

Batch: 78052

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20479408	Sample G1	160 *							
20479409	Sample	86							
20479410	Sample G1	170 *							
20479411	Sample	89							
20479412	Sample G1	147							
20479413	Sample G1	168 *							
20479414	Sample	127							
20479712	BLANK	95							
20479713	LCS	89							
20479742	MS	82							
20479743	MSD	84							

QC limits: 32-157

Sur 1: 4-Bromofluorobenzene (S)

\* denotes surrogate recovery outside of QC limits.  
 S denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an exception.  
 A Lab ID consisting of a batch number with a B suffix is a method blank.  
 A Lab ID consisting of a batch number with a S suffix is an LCS.  
 A Lab ID with a MS suffix is a matrix spike.  
 A Lab ID with a MSD suffix is a matrix spike duplicate.

11/02/06 16:02:28  
 New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 02006  
 Arkansas Dept. of Environmental Quality - 88-0001  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA040033  
 Florida Dept. of Health (FDEPH) - EBT886  
 Kansas Dept. of Health Environment - 0-10384  
 U.S. Dept. of Agriculture Foreign Soil Permit - 3-47270



# Report of Batch Surrogate Recovery

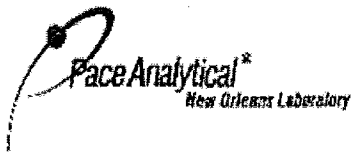
Pace Analytical Services, Inc.  
 1000 Riverbend Blvd. Suite F  
 St. Rose, LA 70087  
 Phone: 504.689.0333  
 Fax: 504.689.0355  
 LELAP # 02006

Report: <u>2063683</u>		Batch: <u>78193</u>							
Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20479415	Sample	73							
20480366	BLANK	83							
20480367	LCS	108							
20480368	MS	90							
20480369	MSD	90							
20480370	BLANK	79							
20480493	LCS	96							
20480791	BLANK	86							
20480792	BLANK	80							
QC limits:		58-143							
Sur 1: 4-Bromofluorobenzene (S)									

\* denotes surrogate recovery outside of QC limits.  
 D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.  
 A Lab ID consisting of a bottle number with a T suffix is a worked blank.  
 A Lab ID consisting of a batch number with a B suffix is a LCS.  
 A Lab ID with a MS suffix is a matrix spike.  
 A Lab ID with a MSD suffix is a matrix spike duplicate.

11/7/2004 16:52:26  
 New Orleans Laboratory Certifications  
 Louisiana Dept. of Environmental Quality (LELAP) - 82008  
 Arkansas Dept. of Environmental Quality - 88-0491  
 Louisiana Dept. of Health and Hospitals / Drinking Water - LA040023  
 Florida Dept. of Health (FELAP) - E87585  
 Kansas Dept. of Health Environment - E-10396  
 U.S. Dept. of Agriculture Foreign Sell Permit - 5-47270





## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
SL Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0335  
LELAP # 02006

Lab ID: 20479636Description: 8082 PCBs WaterProject No.: 2063683Method: EPA 8082Batch: 78037Units: ug/LPrep Factor: 1

Leached:

Prepared: 23-Oct-06Analyzed: 10/26/06 17:52 SLE(1)

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
12674-11-2	PCB-1016 (Aroclor 1016)	1	ND		1.00
11104-28-2	PCB-1221 (Aroclor 1221)	1	ND		1.00
11141-16-5	PCB-1232 (Aroclor 1232)	1	ND		1.00
53489-21-9	PCB-1242 (Aroclor 1242)	1	ND		1.00
12672-29-6	PCB-1248 (Aroclor 1248)	1	ND		1.00
11097-69-1	PCB-1254 (Aroclor 1254)	1	ND		1.00
11096-82-5	PCB-1260 (Aroclor 1260)	1	ND		1.00

7 compounds (all) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) subcontract or field.

11/12/2006 16:59:30  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 88-0441  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
Florida Dept. of Health (FELAC) - 887503  
Kansas Dept. of Health Environment - 0-10286  
U.S. Dept. of Agriculture Foreign Soil Permit - 3-47370



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Lab ID: 20479642Description: 8015 TPH Extractables SoilProject No.: 2063683Method: EPA 8015 ModifiedBatch: 77953Units: mg/kgPrep Factor: 1

Leached:

Prepared: 23-Oct-06Analyzed: 10/27/06 13:59 SPELID

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
	Diesel Range Organics (C10-28)	1	ND		10.0
	Oil Range Organics (>C28-40)	1	ND		50.0

2 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
EF denotes Dilution Factor.  
RL denotes Sample Reporting Limit.  
Qu lists qualifiers. Specific qualifiers are listed at the end of the report.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (5) subcontract or field.

11/2/2006 16:02:35  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 05-0001  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA000023  
Florida Dept. of Health (FELAG) - L37549  
Kansas Dept. of Health, Environment - S-10288  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47770



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.459.0333  
Fax: 504.459.0555  
LELAP # 02006

Lab ID: 20479651Description: TPH Extractables Water BLK LCSProject No.: 2063683Method: EPA 8015 ModifiedBatch: 77855Units: mg/LPrep Factor: 1

Leached:

Prepared: 24-Oct-06Analyzed: 10/27/06 17:18 SEFL(1)

CAS Number	Parameter	Dilution	Result	Qc	Reporting Limit
	Diesel Range Organics (C10-28)	1	ND		0.150
	Oil Range Organics (>C28-40)	1	ND		0.150

2 compounds(s) reported

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qc data qualifies. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Greater Chicago, (4) Houston, or (5) subcontract or field.

11/7/2006 14:01:30

New Orleans Laboratory Certifications

Louisiana Dept. of Environmental Quality (LELAP) - 03006

Alabama Dept. of Environmental Quality - 68-0081

Louisiana Dept. of Health and Hospitals / Drinking Water - LA000023

Florida Dept. of Health (FELAC) - E87583

Kansas Dept. of Health Environment - E-10206

U.S. Dept. of Agriculture Foreign Soil Permit - S-47379



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.489.0333  
Fax: 504.489.0555  
LELAP # 02006

Lab ID: 20479662Description: 8082 PCBs Low SoilProject No.: 2063683Method: EPA 8082Batch: 77402Units: ug/kgPrep Factor: 1

Leached:

Prepared: 24-Oct-06Analyzed: 10/26/06 15:52 SLE (1)

CAS Number	Parameter	Dilution	Result	Q#	Reporting Limit
12674-11-2	PCB-1016 (Aroclor 1016)	1	ND		33.3
11104-28-2	PCB-1221 (Aroclor 1221)	1	ND		33.3
11141-16-5	PCB-1232 (Aroclor 1232)	1	ND		33.3
53469-21-9	PCB-1242 (Aroclor 1242)	1	ND		33.3
12672-29-6	PCB-1248 (Aroclor 1248)	1	ND		33.3
11097-69-1	PCB-1254 (Aroclor 1254)	1	ND		33.3
11096-82-5	PCB-1260 (Aroclor 1260)	1	ND		33.3

7 (compounds) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RL denotes Reporting Limit.  
Q# denotes quality. Specific qualifiers are defined at the end of the report.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) subcontract to B&B.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 02-0001  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA00023  
Florida Dept. of Health (FDELAC) - EBT005  
Kansas Dept. of Health, Environment - 0-10286  
U.S. Dept. of Agriculture Foreign Soil Permit - 0-07270

11/7/2006 16:07:30



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Lab ID: 20479712Description: 8015 TPH Gasoline Med SoilProject No.: 2063683Method: EPA 8015 ModifiedBatch: 78052Units: mg/kgPrep Factor: 1

Leached:

Prepared: 23-Oct-06Analyzed: 10/23/06 13:46 EDT (1)

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
	Gasoline Range Organics(C6-10)	1	ND		2.50
1 compound(s) reported					

ND denotes Not Detected or is above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Rosier City, (4) Houston, or (5) subcontract or field.

11/7/2006 14:02:30

New Orleans Laboratory Certifications

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - 88-0887

Louisiana Dept. of Health and Hospitals / Drinking Water - LA000023

Florida Dept. of Health (FELAC) - 187305

Kansas Dept. of Health, Environment - E-00348

U.S. Dept. of Agriculture Foreign Soil Permit - 5-47370



## Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087  
Phone: 504.469.8333  
Fax: 504.469.0555  
LELAP # 02006

Lab ID: 20480791Description: TPH GRO Water, BlankProject No.: 2063683Method: EPA 8015 ModifiedBatch: 78193Units: mg/LPrep Factor: 1

Leached:

Prepared: 27-Oct-06Analyzed: 10/27/06 20:41 DET (1)

CAS Number	Parameter	Dilution	Result	Qc	Reporting Limit
	Gasoline Range Organics(C6-10)	1	ND		0.0500

1 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RI denotes sample Reporting Limit.  
Qc denotes quality control. Specific quality control are defined at the end of the report.  
Analysis performed by (1) New Orleans, (2) Baton Rouge, (3) Boulder City, (4) Houston, or (5) subcontract or field.

10/7/2006 10:02:38  
New Orleans Laboratory Certification  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 89-0981  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060012  
Florida Dept. of Health (FHLAC) - 237455  
Kansas Dept. of Health Environment - E-10266  
U.S. Dept. of Agriculture Foreign Soil Permit - 3-47170



## Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd. Suite F  
SL Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Project No.: 2063683

Parameter	Batch	Blank	ARL	Units	LCS	LCS	LCS	LCS	MS	MS	MS	(1)MS	DUP	QC Limits	RPD	Qu
					Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	RPD	LCS	MS/MSD	Max
Mercury	77995	ND	0.200	ug/L		1	99		1	95	96	1		70 - 133	24 - 158	20
Mercury	78010	ND	0.0200	mg/kg		0.1	101		0.09	144	126	29 *		47 - 146	23 - 183	20
Antimony	78012	ND	3.00	mg/kg		100	98		86	85	76	22 *		10 - 194	10 - 142	20
Arsenic	78012	ND	1.00	mg/kg		100	97		86	99	95	18		71 - 131	46 - 137	20
Beryllium	78012	ND	0.500	mg/kg		100	102		86	104	104	16		71 - 127	48 - 140	20
Cadmium	78012	ND	0.500	mg/kg		100	100		86	102	101	16		69 - 128	31 - 154	20
Chromium	78012	ND	1.00	mg/kg		100	102		86	105	106	14		70 - 127	34 - 165	20
Copper	78012	ND	1.00	mg/kg		100	102		86	138	85	21 *		73 - 131	30 - 170	20
Lead	78012	ND	0.500	mg/kg		100	101		86	410 *	0 *	96 *		68 - 133	31 - 156	20 Q3
Nickel	78012	ND	4.00	mg/kg		100	104		86	180 *	20 *	45 *		71 - 125	39 - 146	20 Q1
Selenium	78012	ND	3.50	mg/kg		100	91		86	93	87	21 *		66 - 126	41 - 129	20
Silver	78012	ND	1.00	mg/kg		50	104		43	78	94	4		25 - 163	10 - 154	20
Thallium	78012	ND	1.00	mg/kg		100	104		86	86	83	19		68 - 130	39 - 137	20
Zinc	78012	ND	2.00	mg/kg		100	100		86	141	96	22 *		64 - 129	19 - 169	20
Antimony	78035	ND	12.0	ug/L		1000	97							78 - 128	-	
Antimony	78035			ug/L					1000	97	97	1		-	51 - 146	20
Arsenic	78035			ug/L					1000	100	98	2		-	68 - 130	20
Arsenic	78035	ND	10.0	ug/L		1000	98							79 - 122	-	
Beryllium	78035	ND	4.00	ug/L		1000	99							81 - 118	-	
Beryllium	78035			ug/L					1000	101	101	0		-	66 - 129	20
Cadmium	78035			ug/L					1000	95	94	1		-	44 - 146	20
Cadmium	78035	ND	5.00	ug/L		1000	98							81 - 119	-	
Chromium	78035	ND	10.0	ug/L		1000	98							81 - 120	-	
Chromium	78035			ug/L					1000	91	87	4		-	58 - 135	20
Copper	78035	ND	10.0	ug/L		1000	101							77 - 123	-	
Copper	78035			ug/L					1000	96	95	1		-	62 - 136	20
Lead	78035	ND	5.00	ug/L		1000	99							79 - 122	-	
Lead	78035			ug/L					1000	96	95	1		-	58 - 131	20
Nickel	78035			ug/L					1000	87	83	4		-	57 - 129	20
Nickel	78035	ND	40.0	ug/L		1000	99							80 - 121	-	
Selenium	78035	ND	35.0	ug/L		1000	95							76 - 120	-	
Selenium	78035			ug/L					1000	100	98	1		-	59 - 131	20
Silver	78035	ND	10.0	ug/L		500	98							67 - 129	-	
Silver	78035			ug/L					500	99	98	0		-	10 - 154	20
Thallium	78035			ug/L					1000	99	98	1		-	47 - 133	20
Thallium	78035	ND	5.00	ug/L		1000	100							75 - 122	-	
Zinc	78035	ND	20.0	ug/L		1000	99							78 - 124	-	
Zinc	78035			ug/L					1000	95	93	1		-	51 - 139	20

ARL denotes Adjusted Reporting Limit, corrected for sample size, dilution and moisture content as applicable.

\* denotes recovery outside of QC limits.

(1) MS RPD is calculated as 2.5xMS value on the basis of spiked sample concentrations rather than spike recoveries.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 07006  
Arkansas Dept. of Environmental Quality - 88-0081  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA000023  
Florida Dept. of Health (FELAC) - E77885  
Kansas Dept. of Health, Environment - E-10304  
U.S. Dept. of Agriculture Foreign Soil Permit - 6-67379

11/20/06 14:02:33



## Report Qualifiers

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
St. Rose, LA 70087  
Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Project No.: 2063683

### Analyte Qualifiers

Qualifier	Qualifier Description
A7	3-Methylphenol and 4-methylphenol coelute under the conditions used for analysis, therefore the precise isomer in the sample cannot be determined. The sample concentration is arbitrarily reported as 4-methylphenol.
A10	N-Nitrosodiphenylamine is reported as diphenylamine.
A11	This analyte is a common solvent. Its presence in field samples may be an artifact of sample collection, transport, laboratory storage or analysis.
G1	Interferences are present which caused poor surrogate recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.

### General Qualifiers

Qualifier	Qualifier Description
D1	The analysis was performed at a dilution due to the high analyte concentration.
D2	The analysis was performed at a dilution due to the presence of matrix interferences.

### QC Qualifiers

Qualifier	Qualifier Description
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q10	The spike recovery was above the laboratory QC limits, however, the data are reported without qualification since the target analyte was not detected in the corresponding samples.
Q3	The matrix spike recoveries are poor due to the presence of this analyte in the sample at a concentration greater than 4 times the spiked amount. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample.
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.

### Sample Qualifiers

Qualifier	Qualifier Description
P2	The sample extract could not be concentrated to the method specified final volume. The reporting limit is elevated accordingly.
P5	A medium level preparation was performed based upon screening data or the nature of the sample matrix.

11/12/2006 10:02:35  
New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 00-0481  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060021  
Florida Dept. of Health (FDELAC) - 00100  
Kansas Dept. of Health Environment - E-16240  
U.S. Dept. of Agriculture Foreign Sell Permit - 5-47370





# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

**Section A**  
Required Client Information:

Company: LTS Environmental  
 Address: P.O. Box 1318  
Lake Charles, LA 70602-1318  
 Email To: ZACHLEE@G.MAIL.COM  
 Phone: 337-439-0580 Fax: 337-439-0580  
 Requested Due Date (TAT):

**Section B**  
Required Project Information:

Report To: ZACK LEE  
 Copy To:  
 Purchase Order No.:  
 Project Name: UPRR  
 Project Number:

**Section C**  
Invoice Information:

Attention:  
 Company Name:  
 Address:  
 Pace Quote Reference:  
 Pace Project Manager:  
 Pace Profile #:

Page: 1 of 2  
2063683  
935272

**REGULATORY AGENCY**

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER  
☐ UST ☐ RCRA ☐ Other: \_\_\_\_\_

**SITE LOCATION**

☐ OGA ☐ OIL ☐ IN ☐ OME ☐ MN ☐ NC  
☐ ODH ☐ SC ☐ WI ☐ OTHER: \_\_\_\_\_

**Section D** Required Client Information:

**SAMPLE ID**

Use Character per box.  
 (A-Z, 0-9, /, -)  
 Samples DO NOT BE UNIQUE.

Field Name Codes:  
 MATRIX: ☐ DOGS  
 DRINKING WATER: ☐ DW  
 WATER: ☐ WT  
 WASTE WATER: ☐ WW  
 PRODUCT: ☐ P  
 SOIL/SLOPE: ☐ S  
 OIL: ☐ O  
 WIFE: ☐ W  
 AIR: ☐ A  
 OTHER: ☐ OT  
 TISSUE: ☐ T

ITEM #	SAMPLE ID	MATRIX CODE	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVE	ANALYSIS	Pace Project Number	Lab ID
			COMPOSITE START		COMPOSITE END/ANAL							
			DATE	TIME	DATE	TIME						
1	BM-1	SL	6/10/08	9:25			2X		XXXXXX		20479408	
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Additional Comments:

Analyze per LDEQ-AECAP protocol & detection limits.

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITION
<i>[Signature]</i>	6/10/08	10:25	<i>[Signature]</i>	6/10/08	11:28	Y/N Y/N Y/N
<i>[Signature]</i>	6/10/08	10:25	<i>[Signature]</i>	6/10/08	11:28	Y/N Y/N Y/N
<i>[Signature]</i>	6/10/08	10:25	<i>[Signature]</i>	6/10/08	11:28	Y/N Y/N Y/N

## SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

ZACHARY J. LEE

SIGNATURE of SAMPLER:

*[Signature]*

DATE Signed: 6/10/08

Temp in °C

Received on line

Custody Sealed Container

Sealed Samples

Y/N

SEE REVERSE SIDE FOR INSTRUCTIONS

ORIGINAL

ALL 0200 rev. 3.11 May 05

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

855971

www.ldeq.state.la.gov		Required Client Information		Section B		Page: <u>1</u> of <u>2</u>		To Be Completed by Face Analysis and Client		Section C	
Required Client Information: Section A		Report To: <u>ZACK LEE</u>		Copy To:		Client Information (Check one/contract):		Requested Due Date:		Quote Reference:	
Company: <u>LTS ENVIRONMENTAL</u>		Project No: <u>2063683</u>		Project Name: <u>UPRR</u>		Turn around time less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.		Turn Around Time (TAT) is calendar days.		Project Manager:	
Address: <u>P.O. Box 1319</u>		City: <u>Lake Charles, LA 70602-1319</u>		Project Number: <u>337</u>		Project #:		Profile #:		Requested Analysis:	
Phone: <u>(337) 304-1805</u>		Fax: <u>(337) 439-0561</u>		Section D		Required Client Information:		Section E		Section F	
<div style="text-align: center;"> <b>SAMPLE ID</b>            One character per box.            (A-Z 0-9 / -)  <b>Sample IDs MUST BE UNIQUE</b> </div>		<div style="text-align: center;"> <b>COLLECTED</b>            DATE TIME DATE TIME         </div>		<div style="text-align: center;"> <b>ANALYSIS</b>            ANALYST NAME ANALYST TYPE ANALYST SIGNATURE         </div>		<div style="text-align: center;"> <b>PREPARATION</b>            PREPARED BY PREPARED DATE PREPARED TIME PREPARED TIME         </div>		<div style="text-align: center;"> <b>ANALYSIS</b>            ANALYST NAME ANALYST TYPE ANALYST SIGNATURE         </div>		<div style="text-align: center;"> <b>PREPARATION</b>            PREPARED BY PREPARED DATE PREPARED TIME PREPARED TIME         </div>	
<input type="checkbox"/> NC <input type="checkbox"/> SD <input type="checkbox"/> GA <input type="checkbox"/> Other: <u>LA</u>		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> Other:		<input type="checkbox"/> NC <input type="checkbox"/> SD <input type="checkbox"/> GA <input type="checkbox"/> Other: <u>LA</u>		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> Other:		<input type="checkbox"/> NC <input type="checkbox"/> SD <input type="checkbox"/> GA <input type="checkbox"/> Other: <u>LA</u>		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> Other:	
SAMPLE CONDITION		SAMPLE NOTES		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION	
Temp in °C: <u>36</u>		Analyze per LDEQ-RECAP protocol & detection limits.		Zack Lee		10/19/06		18:29		Zack Lee	
Received on Ice: <u>Y</u>				Zack Lee		10/19/06		18:29		Zack Lee	
Sealed Cooler: <u>Y</u>				Zack Lee		10/19/06		18:29		Zack Lee	
Samples Intact: <u>Y</u>				Zack Lee		10/19/06		18:29		Zack Lee	
Additional Comments:				SAMPLER NAME AND SIGNATURE		DATE		TIME		DATE	
				Zack Lee		10/19/06		18:29		10/19/06	
				Zack Lee		10/19/06		18:29		10/19/06	

ORIGINAL

SEE REVERSE SIDE FOR INSTRUCTIONS

Form D0001 Rev. 6/2014

Paul H. Templet, Ph.D.  
Templet Resources Inc.  
4888 Loyola Dr.  
Baton Rouge, La. 70808  
(225) 767-1026  
[ptemplet1@cox.net](mailto:ptemplet1@cox.net)

2/1/16


An Expert Report by Paul H. Templet, Ph.D.  
Regarding the Southern Pacific/Union Pacific Rail Yard in Lafayette, La.

I am a Ph.D. chemical/physicist with particular expertise in environmental chemistry and environmental management. I taught environmental management at Louisiana State University in the Department of Environmental Studies and I was Secretary of the Louisiana Department of Environmental Quality from 1988-1992. I have been qualified as an expert in Louisiana State and federal courts in the areas of environmental chemistry, environmental management, fate and effects of waste, risk assessment and in other areas. A copy of my curriculum vitae is attached to this report along with a list of cases and depositions I have participated in over the past years.

The site being considered is an approximate 40 acre tract where Southern Pacific Transportation (SP/UPRR) conducted rail yard operations ("Site or Facility"). It is located within the city limits of Lafayette, Louisiana bounded on the north by Simco St., on the south by Taft St., on the west by the railroad tracks and on the east by Evangeline Thoroughway.

In connection with this report, I have reviewed reports and publications including those listed below.

- i. C.H. Fenstermaker and Associates (1991). Phase I Environmental Site Assessment Report, Chestnut Street Site, Lafayette, LA
- ii. Hydro-Environmental Technologies ("HET") (1991). Phase II Site Investigation Report, Chestnut Street Site, Lafayette, LA
- iii. HET (1992). Phase III Site Investigation Report, Chestnut Street Site, Lafayette, LA
- iv. Sigma Environmental, Inc., Bray, Brent, R. (2007). Soil and Groundwater Investigation Work Plan Former Railroad Facility, Lafayette, LA

FILED THIS 11  
DAY OF Feb, 2016  
  
Deputy Clerk of Court



- v. Stewart L. Stover, Jr. (2005). Affidavit of Stewart Stover, Consolidated Companies, Inc. v. Union Pacific Railroad Company, et al., USDC WDLA, suit no. 98-1804
- vi. USDC WDLA -- Judge S. Maurice Hicks, Jr. (2006). Memorandum Ruling, Consolidated Companies, Inc. v. Union Pacific Railroad Company, et al., USDC WDLA, suit no. 98-1804
- vii. Arcadis, Geraghty & Miller, 3/20/01, Documentation of soil removal activities, risk based closure.
- viii. Conestoga Rovers & Assocs., 8/14-16/07, Groundwater Monitoring Report.
- ix. ERM, 6/26/06, Corrective Action Work Plan
- x. Lafayette Dept. of Public Works, 12/10/91, letter to DEQ.
- xi. ERM, 11/15/02, Risk Evaluation/Corrective Action Program (RECAP) Report
- xii. Arcadis, 3/26/2001, Documentation of soil removal activities risk-based closure
- xiii. HET (1992) Supplemental Data for Contamination Assessment Report, Conco Food Distributors Facility, 1016 Southwest Evangeline Thruway, Lafayette, La.

My opinions are as follows:

1. Chemical analyses and expert testimony demonstrate that soil and groundwater at the Southern Pacific/Union Pacific Railroad Facility are contaminated to various depths with metals, PAHs, Petroleum Hydrocarbons, BTEX, and chlorinated hydrocarbons at a minimum. Non-aqueous phase liquids (phase separated hydrocarbons) have been found at the site in the soil and groundwater (monitoring well MW5, Stover Affidavit of 1/24/2005) and may indicate dense phases beneath the water layer or lighter phases above it. These phases complicate and intensify the contamination picture of the site.
2. The shallow groundwater flow hasn't been definitively determined, and should be, but depending upon seasonal river stages it appears there is a component moving toward Evangeline Thruway and residential property.
3. DEQ RECAP soil and groundwater screening standards for metals, hydrocarbons, PAHs, and other organic compounds are exceeded.

4. These contaminants are characteristic of and a result of past rail yard operations conducted at the Facility.
5. Some of the contaminants present, including but not limited to PAHs, benzene, xylene, arsenic, lead and are listed hazardous substances under USEPA Superfund regulations, 40 CFR Table 302.4.
6. The contamination is the result of historic Facility operations, including storage, spillage, disposal and/or burial of wastes in soil that is not sound environmental management practice and never has been.
7. Onsite wastes will continue to spread and contribute to greater areas of contamination in the future, spreading horizontally and vertically within and beyond the Facility boundaries and threatening and/or impacting the Chicot Aquifer that is within approximately 40 feet of the surface.
8. The Lafayette North Water Plant water supply well #16 is located immediately adjacent to the Facility. Testing should be done to determine whether Facility contamination has entered/is entering this city of Lafayette drinking water supply well.
9. The entire Facility should be comprehensively assessed and remediated to prevent further contamination of the environment by the wastes remaining onsite, to prevent further offsite migration and the potential for further offsite migration, to prevent potential human exposure, and to eliminate the contamination and/or threat of contamination to the Chicot Aquifer. Piecemeal testing of separate small areas within the site makes little scientific sense because it is not comprehensive or scientifically valid.
10. The soil remediation done at the site (Arcadis, 2001) did not address groundwater and focused only on PAH's, BTEX and TPH. Soil was excavated to depths of 3-6 feet at parts of the site. No groundwater remediation has been done and no consideration has been given to contamination of the Chicot Aquifer.
11. It is highly likely that there are plumes of the contaminants beneath the site that can move with the groundwater and spread to areas beyond the original area of contamination. These plumes have never been delineated or mapped and their extent, flow direction and depth should be determined.
12. Abandoned water wells existed at the site (ERM, 2007, wells 476 & 477) but have not been located or closed. They can serve as conduits to move contaminated groundwater deeper into the Chicot Aquifer
13. The proposed plan of assessment in the February 2006 "Soil and Groundwater Investigation Work Plan Former Railroad Facility, Lafayette, Louisiana by Sigma



Environmental, Inc. (Brent Bray, author) provides a reasonable plan to assess the full nature and extent of the Facility contamination. In addition, the plumes must be fully delineated horizontally and vertically and mapped.

14. Properties adjacent to the Facility should be tested to determine if soil and/or shallow groundwater contamination has migrated onto those properties.
15. Facility soil and groundwater conditions constitute an imminent and substantial endangerment to human health and the environment. For example, Benzene, a known human carcinogen, was found in groundwater at the site in 1991 at 83 ppb. The RECAP Screening Standard (SS) is 5 ppb. Similarly, Lead was found in the groundwater at 160 ppb while the SS is 15 ppb. As troubling was the presence of chlorinated hydrocarbons at levels exceeding the RECAP SS. For example tetrachloroethane was found in the groundwater at levels 17 times the SS, at a minimum. The two separate phase chemicals noted by Stover (affidavit of 1/24/05) were Acetone found at 407,000 ppb (SS is 100 ppb) and MIBK at 527,000 ppb (SS is 200 ppb). The ERM 11/15/02 Risk report did not consider all of these factors.

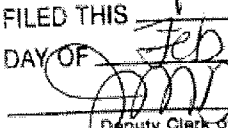
I reserve the right to submit a supplemental report if new information becomes available during discovery, from submittal of defendant expert reports or for other reasons.

Submitted by:

*Paul H. Templet*

Paul H. Templet  
Environmental Consultant

4

FILED THIS 1  
DAY OF Feb, 20 16  
  
Deputy Clerk of Court